

Supplemental Table S2. DEGs between PagLBD21OE and WT

genes	logFC	logCPM	PValue	FDR	up/down	WT	WT	WT
Potri.006	-3.87797	3.737086	7.49E-37	3.22E-32	-1	489	244	234
Potri.009	-0.61921	3.222226	0.001644	0.049759	-1	150	146	137
Potri.012	-0.46393	5.302108	0.001627	0.049307	-1	754	496	541
Potri.006	-0.69881	2.541187	0.00162	0.049164	-1	99	93	81
Potri.017	-0.34837	8.335004	0.00161	0.048925	-1	4628	4818	4643
Potri.014	-0.47334	4.217706	0.001598	0.048737	-1	304	258	276
Potri.001	-0.61748	2.506131	0.00156	0.047688	-1	82	89	89
Potri.016	-0.99925	2.007843	0.001553	0.047514	-1	60	50	90
Potri.004	-0.6862	2.399933	0.001537	0.047254	-1	72	95	78
Potri.T11	-2.76475	2.736297	2.65E-28	2.27E-24	-1	151	159	128
Potri.016	-0.45462	5.986484	0.001517	0.046821	-1	884	1060	899
Potri.009	-0.37531	6.400678	0.001517	0.046821	-1	1481	1114	1142
Potri.013	-1.27496	4.790957	8.22E-24	5.88E-20	-1	543	506	470
Potri.005	-0.60486	2.679938	0.001491	0.046207	-1	103	83	108
Potri.002	-0.36205	6.787399	0.001481	0.046018	-1	1792	1583	1479
Potri.004	-2.07942	3.413293	2.82E-22	1.52E-18	-1	213	241	203
Potri.010	-3.05849	1.666163	1.53E-20	6.55E-17	-1	69	81	57
Potri.001	-0.49446	4.094973	0.001451	0.045363	-1	312	231	233
Potri.006	-0.70112	2.389603	0.001447	0.045292	-1	102	62	82
Potri.006	-0.51823	4.102917	0.001444	0.045275	-1	326	197	264
Potri.018	-0.32683	7.833673	0.001445	0.045275	-1	3410	3185	3310
Potri.001	-1.2656	7.13349	3.00E-20	1.17E-16	-1	3065	2420	2283
Potri.007	-2.18874	2.189752	5.02E-20	1.80E-16	-1	94	89	96
Potri.001	-1.99106	5.031189	9.95E-20	3.29E-16	-1	622	787	607
Potri.016	-0.38953	5.025612	0.001432	0.045063	-1	541	430	468
Potri.010	-0.90361	1.610713	0.00141	0.044624	-1	59	46	42
Potri.017	-0.54321	3.735662	0.001403	0.044471	-1	232	206	172
Potri.008	-2.31162	5.917547	1.47E-18	4.22E-15	-1	1304	1397	1204
Potri.005	-0.58965	7.501352	0.001395	0.044345	-1	4118	1912	2587
Potri.018	-0.62701	3.209869	0.001386	0.044218	-1	116	153	159
Potri.018	-2.22333	2.191267	1.36E-17	3.25E-14	-1	84	93	103
Potri.004	-0.37456	6.123059	0.001353	0.043381	-1	1131	1001	939
Potri.007	-0.47172	4.35802	0.001348	0.043284	-1	359	274	293
Potri.009	-2.47474	3.388679	3.68E-17	7.53E-14	-1	195	295	184
Potri.006	-0.53989	3.958022	0.001327	0.042746	-1	267	249	196
Potri.001	-0.53298	3.08634	0.001325	0.042728	-1	128	125	131
Potri.001	-0.61114	3.032776	0.001311	0.04237	-1	120	147	110
Potri.003	-0.54563	3.727711	0.001295	0.04196	-1	202	217	186
Potri.016	-0.84362	2.400486	0.001269	0.041212	-1	71	85	99
Potri.008	-0.92918	1.548146	0.001262	0.041153	-1	48	35	58
Potri.012	-1.14766	5.867865	5.54E-16	7.93E-13	-1	1132	1044	958
Potri.010	-0.41868	4.543823	0.00123	0.040439	-1	349	324	361
Potri.009	-2.23261	2.770109	2.49E-15	3.35E-12	-1	131	169	124
Potri.003	-0.73101	3.046863	0.001223	0.040327	-1	119	132	142
Potri.008	-0.70548	2.9262	0.001222	0.040298	-1	164	93	105
Potri.009	-0.51958	3.396068	0.001213	0.040163	-1	160	161	155
Potri.010	-0.77616	2.012043	0.001211	0.040141	-1	81	59	51
Potri.008	-0.51994	4.86078	0.001204	0.039955	-1	556	435	345
Potri.005	-0.44271	4.27048	0.001195	0.039872	-1	312	250	300
Potri.005	-0.39338	5.782048	0.001197	0.039872	-1	952	748	742
Potri.003	-0.81174	3.692501	0.001194	0.039871	-1	319	147	176

Potri.003	-0.3737	6.481266	0.00119	0.039798	-1	1335	1285	1308
Potri.006	-0.76862	1.912504	0.001188	0.039784	-1	68	61	48
Potri.005	-0.48778	4.206288	0.001188	0.039784	-1	311	224	301
Potri.019	-0.37741	5.729314	0.00118	0.039608	-1	852	752	733
Potri.007	-0.50417	4.266085	0.001179	0.039588	-1	327	277	271
Potri.001	-0.84518	1.410782	0.001171	0.039407	-1	47	38	40
Potri.009	-0.76114	2.580112	0.001172	0.039407	-1	103	112	70
Potri.013	-0.5108	3.804479	0.00117	0.039407	-1	260	196	180
Potri.014	-0.61616	3.453228	0.001166	0.039374	-1	147	187	173
Potri.017	-0.43943	4.323194	0.001167	0.039374	-1	344	261	290
Potri.005	-0.46274	6.261908	0.001156	0.039048	-1	1124	1067	1269
Potri.003	-0.52846	3.591735	0.001144	0.038692	-1	190	178	180
Potri.007	-1.79363	3.332394	1.58E-14	1.79E-11	-1	192	220	184
Potri.013	-0.46587	6.037852	0.001117	0.037942	-1	1039	1012	917
Potri.006	-0.44256	5.182526	0.001113	0.037852	-1	674	473	489
Potri.004	-1.09533	5.898313	2.82E-14	2.95E-11	-1	1113	1071	978
Potri.003	-0.63878	3.297433	0.001102	0.03764	-1	163	169	127
Potri.004	-0.36646	7.261809	0.001098	0.037536	-1	2193	2285	2250
Potri.009	-0.74618	3.219596	0.001096	0.037523	-1	193	110	147
Potri.001	-3.13512	3.626244	3.92E-14	4.01E-11	-1	214	399	228
Potri.010	-0.48642	5.948115	0.001087	0.03734	-1	795	1027	966
Potri.001	-0.36696	5.948762	0.001083	0.037244	-1	1029	833	856
Potri.008	-0.41681	4.755199	0.001081	0.037201	-1	403	409	385
Potri.018	-4.34427	1.948238	6.85E-14	6.84E-11	-1	126	27	120
Potri.006	-3.67759	0.815196	1.14E-13	1.11E-10	-1	44	47	23
Potri.014	-1.34138	5.469652	2.29E-13	2.14E-10	-1	1109	565	821
Potri.010	-0.40018	5.627239	0.001069	0.036992	-1	859	640	699
Potri.009	-3.61904	1.269807	4.07E-13	3.72E-10	-1	28	72	59
Potri.001	-0.44593	4.017667	0.001053	0.036534	-1	252	227	243
Potri.001	-1.42728	2.83498	4.39E-13	3.93E-10	-1	141	129	125
Potri.016	-0.72581	3.269722	0.001049	0.036462	-1	128	190	140
Potri.002	-0.60124	3.169002	0.001041	0.036244	-1	175	127	115
Potri.008	-0.57658	3.140712	0.001028	0.035839	-1	140	141	123
Potri.001	-0.37551	6.817241	0.001028	0.035839	-1	1936	1515	1536
Potri.004	-0.73841	2.406566	0.001019	0.035614	-1	100	80	71
Potri.019	-0.37564	6.969283	0.001018	0.035607	-1	1766	1857	1882
Potri.001	-0.41992	6.90144	0.001013	0.035476	-1	2006	1522	1826
Potri.016	-0.4446	7.564282	0.001011	0.035452	-1	3638	2368	2577
Potri.001	-0.44444	4.678353	0.001011	0.035452	-1	393	350	402
Potri.005	-0.7328	3.362914	0.001002	0.035217	-1	178	123	193
Potri.019	-0.42078	7.496723	0.000999	0.0352	-1	3267	2199	2652
Potri.009	-0.42169	5.289645	0.000997	0.035168	-1	606	582	553
Potri.009	-0.39685	5.447107	0.000997	0.035168	-1	722	573	639
Potri.010	-0.5491	3.533453	0.000995	0.035151	-1	201	176	153
Potri.001	-0.87554	3.380117	0.000993	0.035117	-1	147	175	193
Potri.002	-0.95884	1.332196	0.000989	0.035029	-1	41	36	44
Potri.002	-0.46794	4.020839	0.000983	0.034876	-1	271	243	215
Potri.010	-0.71312	2.4152	0.000972	0.034544	-1	82	84	84
Potri.T07	-0.39643	7.209608	0.000972	0.034544	-1	2112	2111	2325
Potri.016	-0.46345	4.352118	0.00097	0.034528	-1	331	269	318
Potri.005	-0.57828	3.714096	0.000967	0.03447	-1	255	167	187
Potri.001	-0.52087	5.051128	0.000967	0.03447	-1	538	519	461
Potri.013	-0.67898	2.827031	0.000949	0.033952	-1	106	117	109
Potri.004	-0.54051	3.909573	0.000939	0.033674	-1	257	195	237

Potri.010	-0.40841	5.408198	0.000931	0.033465	-1	639	635	608
Potri.009	-0.74952	2.184992	0.000923	0.033266	-1	72	74	68
Potri.004	-0.66726	2.997528	0.000919	0.033221	-1	140	109	126
Potri.019	-0.83944	1.968901	0.000903	0.032814	-1	55	57	75
Potri.008	-0.65462	2.369551	0.000903	0.032814	-1	91	72	76
Potri.007	-0.90591	2.168169	0.0009	0.032764	-1	83	80	57
Potri.015	-0.35277	6.422748	0.000895	0.032611	-1	1339	1200	1215
Potri.010	-0.42069	5.687065	0.000894	0.032604	-1	896	637	773
Potri.001	-0.46181	4.649842	0.000865	0.031761	-1	464	330	340
Potri.015	-1.93473	2.126491	2.45E-12	1.81E-09	-1	72	106	79
Potri.010	-0.38866	6.235802	0.000849	0.031301	-1	1326	985	1035
Potri.019	-1.07574	4.440191	2.44E-12	1.81E-09	-1	469	338	338
Potri.007	-0.40551	6.00418	0.000825	0.030602	-1	944	1025	874
Potri.013	-0.3821	7.79998	0.000816	0.030315	-1	3628	3013	3224
Potri.006	-0.61531	3.709977	0.000812	0.030254	-1	196	191	222
Potri.001	-3.23355	1.153929	2.78E-12	1.99E-09	-1	36	67	40
Potri.006	-0.76579	2.684201	0.000805	0.030047	-1	96	82	129
Potri.005	-2.85167	1.17118	3.13E-12	2.16E-09	-1	36	54	51
Potri.003	-0.71845	2.830597	0.000785	0.029428	-1	117	106	114
Potri.015	-0.46265	4.480355	0.000784	0.029428	-1	324	311	366
Potri.006	-0.50712	4.054521	0.000773	0.029145	-1	307	232	218
Potri.015	-0.44237	5.570131	0.000769	0.029031	-1	832	647	659
Potri.001	-0.50759	3.888072	0.000761	0.028803	-1	258	185	230
Potri.010	-0.46284	4.228686	0.000759	0.028738	-1	310	277	255
Potri.015	-0.4636	4.287848	0.000757	0.028703	-1	319	260	299
Potri.004	-0.59169	3.08855	0.000735	0.027917	-1	147	116	129
Potri.004	-1.54461	3.528254	3.29E-12	2.21E-09	-1	194	239	223
Potri.010	-0.39049	5.500803	0.000722	0.027518	-1	725	609	668
Potri.017	-0.45856	5.00461	0.000717	0.02734	-1	456	504	479
Potri.004	-0.50155	4.157757	0.000715	0.027283	-1	267	259	282
Potri.019	-0.34939	9.08361	0.000715	0.027283	-1	8029	7540	8151
Potri.016	-0.73962	2.807925	0.000709	0.027143	-1	99	137	96
Potri.006	-0.35506	7.789403	0.000691	0.026558	-1	3579	2951	3184
Potri.003	-0.48615	4.308343	0.00069	0.026521	-1	324	276	296
Potri.019	-1.51747	3.171228	4.42E-12	2.92E-09	-1	144	194	169
Potri.004	-0.42303	4.986564	0.000685	0.026391	-1	543	439	433
Potri.006	-1.26879	2.892251	4.74E-12	3.04E-09	-1	156	125	119
Potri.015	-0.41593	5.794331	0.000681	0.026288	-1	947	724	808
Potri.T08	-0.39833	5.344357	0.000673	0.026003	-1	610	604	581
Potri.010	-0.59125	5.402578	0.000663	0.025736	-1	587	826	552
Potri.008	-3.10096	1.456521	5.25E-12	3.27E-09	-1	87	64	28
Potri.011	-3.76003	0.873483	7.02E-12	4.31E-09	-1	24	60	35
Potri.001	-0.57131	4.041254	0.000643	0.025104	-1	303	192	269
Potri.005	-0.7276	2.213966	0.000641	0.02506	-1	67	79	71
Potri.008	-1.67363	2.282093	1.42E-11	8.22E-09	-1	86	92	99
Potri.007	-0.47456	4.889154	0.000606	0.023849	-1	486	451	402
Potri.004	-0.79784	2.702841	0.000599	0.023632	-1	120	69	126
Potri.015	-0.76043	4.656962	0.000593	0.023447	-1	318	513	388
Potri.014	-0.86717	2.275699	0.000591	0.02338	-1	90	60	86
Potri.002	-0.8084	2.161945	0.000589	0.023329	-1	78	64	72
Potri.001	-0.82616	1.74707	0.000584	0.023167	-1	54	50	55
Potri.003	-0.43239	5.061458	0.000583	0.023147	-1	502	482	505
Potri.014	-0.48258	4.585692	0.000581	0.02309	-1	360	354	370
Potri.007	-0.66512	4.439421	0.00057	0.022728	-1	351	386	292

Potri.003	-0.51647	4.126087	0.00057	0.022728	-1	318	232	248
Potri.011	-0.51258	4.120704	0.000566	0.022628	-1	255	270	264
Potri.014	-0.48756	4.974276	0.000556	0.022247	-1	538	438	453
Potri.005	-0.86009	4.118291	0.000547	0.022008	-1	224	365	269
Potri.019	-0.47819	5.243822	0.000543	0.021896	-1	715	472	539
Potri.014	-1.49337	2.411654	3.61E-11	1.99E-08	-1	92	89	114
Potri.002	-1.35071	2.892329	3.58E-11	1.99E-08	-1	129	120	156
Potri.001	-0.54611	5.968187	0.000527	0.021384	-1	852	1112	913
Potri.015	-1.55698	2.28397	7.84E-11	4.21E-08	-1	81	89	102
Potri.009	-0.7391	2.855223	0.000525	0.021343	-1	96	135	112
Potri.007	-1.42187	3.865865	8.54E-11	4.46E-08	-1	239	322	252
Potri.004	-0.57997	3.389362	0.000524	0.021309	-1	154	175	152
Potri.004	-0.53103	3.695942	0.000524	0.021309	-1	205	199	186
Potri.010	-0.62971	3.079683	0.00051	0.020906	-1	154	108	132
Potri.013	-0.48036	4.049937	0.000509	0.020886	-1	274	226	247
Potri.006	-0.42279	6.865276	0.000505	0.020735	-1	2024	1484	1723
Potri.006	-0.55188	3.48138	0.000504	0.020709	-1	174	178	158
Potri.007	-0.59394	3.006476	0.000501	0.020621	-1	125	127	117
Potri.012	-0.47323	4.174821	0.000499	0.020561	-1	303	238	273
Potri.011	-0.51966	4.318475	0.000492	0.020353	-1	290	290	328
Potri.016	-0.39699	5.781256	0.000492	0.020353	-1	827	809	796
Potri.001	-0.37485	7.09345	0.00049	0.02034	-1	2302	1879	1854
Potri.016	-6.77297	-0.49202	1.85E-10	9.13E-08	-1	17	17	8
Potri.019	-0.49031	4.374596	0.000481	0.020097	-1	297	319	320
Potri.005	-0.7166	3.347345	0.000478	0.02004	-1	186	130	171
Potri.018	-0.77088	2.652302	0.000475	0.019922	-1	96	123	81
Potri.003	-0.74221	2.484828	0.000474	0.019913	-1	95	97	73
Potri.014	-0.61413	4.93841	0.000472	0.019883	-1	552	421	472
Potri.T09	-3.52523	0.112361	4.62E-10	2.05E-07	-1	15	29	21
Potri.004	-0.39941	6.407688	0.000469	0.019826	-1	1353	1121	1296
Potri.001	-0.40877	6.6977	0.000468	0.019803	-1	1529	1504	1577
Potri.003	-0.437	4.766147	0.000466	0.01973	-1	448	378	391
Potri.002	-0.51027	4.954981	0.000464	0.019687	-1	460	486	466
Potri.015	-0.69634	3.03347	0.000458	0.019503	-1	124	140	122
Potri.012	-0.64652	6.521623	0.000458	0.019503	-1	2082	973	1374
Potri.006	-0.60873	3.688349	0.000459	0.019503	-1	189	215	194
Potri.003	-0.80638	2.289623	0.000453	0.019346	-1	96	66	73
Potri.008	-0.56579	4.302195	0.000452	0.019326	-1	385	250	282
Potri.007	-0.94813	2.240228	0.000438	0.01879	-1	64	79	90
Potri.010	-0.58436	3.404225	0.000434	0.018645	-1	157	161	169
Potri.004	-0.77593	2.345836	0.000429	0.018455	-1	103	67	73
Potri.002	-1.00118	5.622178	5.33E-10	2.26E-07	-1	885	844	825
Potri.008	-0.65897	2.992311	0.000424	0.018302	-1	115	139	117
Potri.001	-1.09081	3.592691	6.86E-10	2.89E-07	-1	193	205	231
Potri.002	-0.84611	3.422114	0.000417	0.018015	-1	255	136	143
Potri.003	-0.52717	3.734729	0.000414	0.01791	-1	213	198	195
Potri.005	-0.94076	1.870048	0.000408	0.017723	-1	47	63	68
Potri.013	-1.49272	1.733532	1.40E-09	5.58E-07	-1	63	58	60
Potri.001	-0.49661	4.130852	0.0004	0.017437	-1	302	233	260
Potri.014	-0.76166	3.881969	0.000397	0.017311	-1	325	160	237
Potri.003	-0.40514	5.436004	0.000397	0.017311	-1	709	583	631
Potri.015	-0.49959	4.063239	0.000394	0.017235	-1	255	253	248
Potri.008	-0.64845	3.090625	0.000393	0.017208	-1	128	137	132
Potri.014	-0.89093	2.414861	0.00039	0.017116	-1	82	86	93

Potri.010	-1.31428	4.374748	1.47E-09	5.81E-07	-1	497	232	425
Potri.002	-0.62827	3.077539	0.000387	0.017029	-1	153	116	124
Potri.005	-0.55581	4.206249	0.000386	0.017029	-1	308	260	283
Potri.008	-0.60685	3.246997	0.000377	0.016687	-1	149	151	139
Potri.016	-0.44206	5.728275	0.000378	0.016687	-1	836	808	733
Potri.014	-0.8407	2.100781	0.000372	0.016486	-1	88	58	61
Potri.012	-1.84566	2.482419	1.87E-09	7.23E-07	-1	99	133	96
Potri.015	-0.81113	3.064708	0.000363	0.016179	-1	166	116	127
Potri.001	-0.61881	3.462328	0.000353	0.015778	-1	169	185	158
Potri.015	-1.26801	4.170743	2.60E-09	9.79E-07	-1	280	419	277
Potri.005	-0.6001	4.164586	0.000341	0.015381	-1	246	285	301
Potri.001	-0.50902	6.058827	0.000341	0.015381	-1	999	1105	938
Potri.014	-1.44014	2.08857	3.76E-09	1.32E-06	-1	78	65	89
Potri.002	-0.40023	6.475172	0.000334	0.015207	-1	1365	1279	1301
Potri.001	-0.46319	4.520176	0.000333	0.015167	-1	376	334	322
Potri.010	-0.66743	2.821807	0.000327	0.014967	-1	105	102	123
Potri.013	-0.4919	4.861902	0.000325	0.014903	-1	511	442	370
Potri.005	-0.81174	2.05911	0.000321	0.014773	-1	76	61	62
Potri.008	-0.48234	4.425752	0.00032	0.014757	-1	371	295	307
Potri.001	-0.58717	4.850383	0.000316	0.014595	-1	394	509	434
Potri.004	-0.69537	2.62804	0.000309	0.01439	-1	118	85	88
Potri.002	-1.03671	3.210023	6.62E-09	2.11E-06	-1	166	144	166
Potri.001	-0.63427	3.175363	0.000297	0.013946	-1	165	122	135
Potri.006	-0.39348	7.403529	0.000294	0.013817	-1	2488	2384	2620
Potri.005	-1.42841	2.24758	6.88E-09	2.17E-06	-1	77	80	102
Potri.007	-1.21678	3.316892	1.04E-08	3.12E-06	-1	158	210	163
Potri.004	-1.02315	3.408474	1.35E-08	3.96E-06	-1	218	142	188
Potri.001	-0.87856	3.029737	0.000284	0.013415	-1	125	135	143
Potri.009	-0.7956	2.217801	0.000284	0.013415	-1	80	70	72
Potri.001	-1.98146	0.808612	1.42E-08	4.15E-06	-1	30	33	35
Potri.005	-0.52244	4.253255	0.000278	0.013207	-1	290	286	293
Potri.006	-0.40875	6.091339	0.000277	0.013169	-1	1099	977	958
Potri.007	-0.43665	5.151958	0.000274	0.013082	-1	576	511	504
Potri.001	-0.6622	3.444799	0.000274	0.013072	-1	200	159	155
Potri.006	-0.56201	3.801044	0.000274	0.013072	-1	256	206	181
Potri.007	-1.02564	2.880539	1.45E-08	4.20E-06	-1	132	120	124
Potri.004	-1.24339	4.841806	1.60E-08	4.57E-06	-1	421	628	502
Potri.016	-0.41361	7.785919	0.000262	0.01267	-1	3699	2840	3333
Potri.006	-0.78457	2.708084	0.000256	0.012441	-1	105	91	118
Potri.001	-1.22544	3.052928	1.73E-08	4.91E-06	-1	180	132	133
Potri.002	-0.81062	2.74085	0.000251	0.012245	-1	90	127	105
Potri.007	-1.17343	4.510188	1.79E-08	5.05E-06	-1	326	468	419
Potri.001	-0.62352	3.206022	0.000247	0.012065	-1	154	131	144
Potri.004	-0.67172	3.285445	0.000245	0.011977	-1	152	135	172
Potri.017	-0.5066	4.687404	0.00024	0.011794	-1	365	372	433
Potri.008	-0.64399	4.477002	0.000238	0.011732	-1	434	241	384
Potri.010	-0.80233	2.39233	0.000238	0.011728	-1	73	91	87
Potri.002	-0.74814	2.908518	0.000236	0.011646	-1	131	127	101
Potri.006	-0.38945	8.085736	0.000235	0.011615	-1	4050	4065	3896
Potri.016	-0.40979	7.163566	0.000234	0.011573	-1	2379	2075	1941
Potri.019	-2.04492	3.680571	2.04E-08	5.69E-06	-1	216	377	193
Potri.016	-1.16842	2.511931	2.69E-08	7.23E-06	-1	98	86	114
Potri.005	-1.60457	2.129072	2.78E-08	7.36E-06	-1	108	71	68
Potri.008	-0.4338	7.062808	0.000226	0.011225	-1	1946	2155	1875

Potri.019	-2.0381	2.316408	2.81E-08	7.39E-06	-1	72	142	84
Potri.004	-1.45228	1.929719	3.01E-08	7.84E-06	-1	86	55	67
Potri.001	-1.9027	0.908729	3.05E-08	7.87E-06	-1	44	27	34
Potri.008	-0.63904	3.452282	0.000222	0.011132	-1	167	191	153
Potri.003	-0.61805	4.076674	0.000222	0.011131	-1	346	224	225
Potri.014	-0.47088	4.714936	0.000222	0.011131	-1	422	358	405
Potri.017	-0.37239	7.942812	0.000221	0.011103	-1	3855	3491	3498
Potri.003	-1.33626	2.823601	3.08E-08	7.87E-06	-1	128	110	147
Potri.005	-0.60545	3.537509	0.000216	0.010904	-1	187	160	192
Potri.007	-0.95837	1.519281	0.000215	0.010897	-1	50	42	47
Potri.014	-1.09296	3.211246	3.08E-08	7.87E-06	-1	187	117	180
Potri.018	-0.42874	6.156778	0.000206	0.01047	-1	1069	1060	1057
Potri.005	-0.72692	3.806899	0.000199	0.010165	-1	214	227	230
Potri.009	-0.70447	3.262482	0.000196	0.010059	-1	192	133	133
Potri.003	-0.46742	5.655082	0.000195	0.009992	-1	821	657	802
Potri.019	-0.67426	3.128257	0.00019	0.00981	-1	169	115	129
Potri.010	-0.49172	5.165801	0.000186	0.009629	-1	668	496	475
Potri.005	-1.45525	3.45393	3.80E-08	9.42E-06	-1	170	234	208
Potri.013	-0.42816	5.967918	0.000182	0.009439	-1	1052	882	870
Potri.011	-0.92493	2.100934	0.000181	0.009403	-1	63	60	87
Potri.011	-0.65298	4.073855	0.00018	0.009396	-1	359	210	233
Potri.001	-0.57569	4.831037	0.000181	0.009396	-1	523	371	434
Potri.007	-0.46798	5.204825	0.00018	0.009396	-1	553	582	526
Potri.002	-1.04507	2.713601	4.17E-08	1.02E-05	-1	131	107	98
Potri.005	-0.42442	7.614746	0.000176	0.009226	-1	3248	2702	2836
Potri.001	-0.51955	5.873937	0.000172	0.009027	-1	805	1019	852
Potri.005	-1.55181	2.523132	4.62E-08	1.10E-05	-1	92	122	108
Potri.013	-0.69383	6.827092	0.000165	0.00871	-1	1780	1738	1944
Potri.012	-0.6953	3.560658	0.000164	0.008652	-1	223	168	172
Potri.006	-0.47533	4.98555	0.000162	0.00859	-1	458	477	493
Potri.001	-0.75869	2.329501	0.00016	0.008516	-1	79	78	81
Potri.012	-0.60164	3.273356	0.00016	0.008506	-1	158	149	140
Potri.007	-0.4826	6.227142	0.000159	0.008484	-1	1033	1145	1211
Potri.003	-0.61867	6.308178	0.000158	0.008439	-1	1619	943	1211
Potri.002	-0.71892	2.876799	0.000156	0.008383	-1	114	100	134
Potri.005	-0.51265	5.427702	0.000155	0.008375	-1	769	546	662
Potri.003	-0.72716	3.450757	0.000153	0.008271	-1	234	159	134
Potri.001	-2.37458	0.275866	4.69E-08	1.11E-05	-1	24	20	24
Potri.007	-0.56334	5.786903	0.000153	0.008254	-1	801	1009	742
Potri.010	-0.66664	8.025793	0.000152	0.008207	-1	3827	4425	4174
Potri.006	-0.43383	5.592608	0.000152	0.008207	-1	756	715	687
Potri.007	-0.48344	4.796896	0.000151	0.008187	-1	466	410	384
Potri.006	-1.22662	2.908646	5.01E-08	1.17E-05	-1	160	94	148
Potri.011	-0.99695	1.547481	0.00015	0.008156	-1	47	41	55
Potri.001	-0.63476	3.57167	0.00015	0.008156	-1	204	182	171
Potri.009	-1.114	6.062991	6.59E-08	1.51E-05	-1	949	1380	1202
Potri.011	-0.74288	3.111409	0.000147	0.008053	-1	176	107	133
Potri.005	-0.96249	1.851921	0.000143	0.007894	-1	77	44	57
Potri.014	-1.48352	2.996196	8.04E-08	1.76E-05	-1	107	183	154
Potri.001	-0.4958	5.797962	0.000136	0.007523	-1	869	831	833
Potri.005	-0.58483	4.696125	0.000135	0.007475	-1	407	357	442
Potri.006	-0.50468	4.733937	0.000134	0.007472	-1	430	370	412
Potri.001	-0.46957	4.776263	0.000134	0.007472	-1	444	403	389
Potri.005	-1.73172	2.551642	8.60E-08	1.86E-05	-1	125	61	155

Potri.001	-0.51172	4.595624	0.000132	0.007402	-1	376	367	358
Potri.007	-0.50809	4.508454	0.000131	0.007363	-1	358	308	370
Potri.013	-0.4471	7.393191	0.000131	0.007363	-1	2461	2443	2648
Potri.009	-1.80422	3.004138	1.02E-07	2.16E-05	-1	100	199	171
Potri.010	-0.6309	3.704769	0.000127	0.00719	-1	213	212	185
Potri.004	-1.13119	4.601444	1.26E-07	2.62E-05	-1	642	294	372
Potri.009	-0.66464	3.301246	0.000124	0.007071	-1	155	161	147
Potri.018	-0.57368	4.755013	0.000122	0.006981	-1	534	332	396
Potri.018	-0.50297	4.535215	0.000121	0.006938	-1	410	331	316
Potri.010	-4.64696	-0.63094	1.41E-07	2.88E-05	-1	13	17	6
Potri.008	-1.16406	3.736152	1.53E-07	3.11E-05	-1	191	288	225
Potri.T11	-0.86897	3.006554	0.000116	0.006644	-1	106	157	131
Potri.003	-0.50984	5.842655	0.000114	0.006569	-1	811	872	933
Potri.014	-0.4238	6.60115	0.000113	0.006556	-1	1451	1454	1426
Potri.010	-0.60711	5.576769	0.000113	0.006532	-1	713	696	828
Potri.015	-0.65846	3.695195	0.000111	0.006489	-1	177	217	214
Potri.010	-2.29565	0.64994	1.67E-07	3.31E-05	-1	22	42	26
Potri.014	-1.11171	3.82359	1.76E-07	3.43E-05	-1	219	275	248
Potri.002	-0.46859	6.088222	0.000107	0.006322	-1	1079	1062	935
Potri.006	-0.59253	3.882952	0.000105	0.006188	-1	235	228	221
Potri.007	-0.5271	4.118495	0.000104	0.006177	-1	280	262	251
Potri.008	-0.44543	6.491986	0.000104	0.006159	-1	1521	1256	1280
Potri.013	-1.05501	5.035228	2.15E-07	4.11E-05	-1	793	364	581
Potri.010	-1.18662	4.602913	2.32E-07	4.36E-05	-1	311	493	491
Potri.T05	-0.6433	6.326917	0.000102	0.006147	-1	1306	1336	1168
Potri.001	-1.01874	2.474847	2.32E-07	4.36E-05	-1	96	97	88
Potri.014	-1.45533	3.534043	2.48E-07	4.57E-05	-1	146	202	298
Potri.002	-0.60368	4.136589	9.60E-05	0.005819	-1	245	277	295
Potri.006	-2.06377	3.719631	2.63E-07	4.79E-05	-1	167	400	239
Potri.008	-0.66442	3.230829	9.30E-05	0.005702	-1	170	145	127
Potri.003	-0.63823	4.632977	9.31E-05	0.005702	-1	398	400	372
Potri.003	-0.70998	3.208474	9.15E-05	0.005623	-1	136	166	136
Potri.009	-0.5774	4.154284	8.97E-05	0.005518	-1	330	230	268
Potri.013	-0.45573	7.946559	8.80E-05	0.00544	-1	4244	3099	3838
Potri.002	-1.46237	1.486327	2.63E-07	4.79E-05	-1	45	46	59
Potri.013	-2.4245	0.093273	3.02E-07	5.43E-05	-1	21	21	17
Potri.003	-0.65944	2.968201	8.70E-05	0.005401	-1	129	112	125
Potri.016	-0.50465	5.0246	8.70E-05	0.005401	-1	511	514	457
Potri.002	-0.79191	3.990281	8.52E-05	0.005327	-1	228	285	261
Potri.008	-0.95817	1.866137	8.38E-05	0.005274	-1	66	62	51
Potri.006	-1.12007	3.374216	3.89E-07	6.71E-05	-1	233	117	198
Potri.005	-1.55039	1.260528	4.03E-07	6.90E-05	-1	44	48	37
Potri.017	-1.35149	2.40108	4.06E-07	6.91E-05	-1	107	103	76
Potri.012	-0.49605	4.786454	8.30E-05	0.005247	-1	420	403	429
Potri.012	-0.3932	10.06187	8.16E-05	0.00521	-1	16456	15243	15695
Potri.001	-1.24878	5.238923	4.14E-07	7.00E-05	-1	559	749	742
Potri.010	-0.89192	3.626745	7.80E-05	0.004998	-1	159	238	216
Potri.013	-0.70233	4.087148	7.81E-05	0.004998	-1	303	194	319
Potri.018	-0.66843	4.561609	7.81E-05	0.004998	-1	315	441	360
Potri.016	-0.76664	7.76737	7.59E-05	0.004905	-1	4343	3191	3237
Potri.001	-0.50504	5.018607	7.54E-05	0.004884	-1	593	440	451
Potri.019	-2.38374	0.180286	4.19E-07	7.06E-05	-1	21	21	21
Potri.006	-0.70617	5.461544	7.40E-05	0.004815	-1	727	637	761
Potri.007	-2.20053	0.575166	4.87E-07	8.02E-05	-1	18	32	34

Potri.010	-0.70568	6.412507	7.30E-05	0.004783	-1	1009	1386	1683
Potri.008	-0.44044	7.807973	7.32E-05	0.004783	-1	3740	2945	3414
Potri.008	-0.78517	2.915856	7.13E-05	0.004712	-1	141	106	118
Potri.004	-1.87603	1.029771	5.53E-07	9.00E-05	-1	33	51	30
Potri.007	-0.4995	8.251177	6.98E-05	0.004642	-1	4527	4769	4601
Potri.019	-0.77054	2.70206	6.83E-05	0.004551	-1	98	108	105
Potri.T05	-0.74152	3.104253	6.76E-05	0.004518	-1	140	150	121
Potri.019	-0.41213	9.366868	6.66E-05	0.004476	-1	10781	8991	9728
Potri.015	-0.73372	2.783581	6.52E-05	0.004397	-1	113	112	102
Potri.013	-0.8561	4.916857	6.48E-05	0.004379	-1	570	526	417
Potri.003	-0.7836	3.562829	6.47E-05	0.004373	-1	191	194	189
Potri.017	-0.91837	1.99254	6.33E-05	0.004298	-1	63	67	64
Potri.017	-1.45618	1.31499	7.39E-07	0.000115	-1	41	50	41
Potri.015	-0.46369	6.565037	6.23E-05	0.004239	-1	1590	1284	1416
Potri.009	-0.49926	4.815857	6.18E-05	0.004211	-1	426	410	443
Potri.005	-0.54551	6.056945	6.11E-05	0.004169	-1	1207	858	1027
Potri.001	-0.52937	4.7834	6.00E-05	0.004119	-1	461	368	436
Potri.004	-1.53456	1.146047	8.59E-07	0.000129	-1	36	45	37
Potri.010	-2.31751	0.129618	9.82E-07	0.000144	-1	18	22	20
Potri.005	-0.64177	5.302218	5.68E-05	0.003931	-1	771	471	640
Potri.010	-0.49043	5.414903	5.30E-05	0.003693	-1	763	565	619
Potri.001	-0.57302	5.75023	5.28E-05	0.003691	-1	959	770	785
Potri.001	-1.33603	2.698117	9.93E-07	0.000145	-1	157	124	73
Potri.016	-0.53141	5.084979	5.24E-05	0.003678	-1	510	507	539
Potri.003	-1.11215	2.393036	1.10E-06	0.000159	-1	119	74	79
Potri.014	-0.84672	2.541504	5.15E-05	0.003629	-1	111	77	96
Potri.T13	-0.98467	1.763424	5.13E-05	0.003621	-1	56	51	60
Potri.001	-1.46901	1.099163	1.24E-06	0.000173	-1	43	30	40
Potri.001	-1.1439	2.932477	1.25E-06	0.000174	-1	107	152	139
Potri.013	-0.49151	6.050316	4.85E-05	0.00347	-1	1143	864	1020
Potri.002	-0.56269	5.344383	4.80E-05	0.003445	-1	666	682	535
Potri.008	-0.63895	3.954555	4.67E-05	0.003371	-1	247	253	228
Potri.013	-0.69388	3.145737	4.65E-05	0.003371	-1	155	136	128
Potri.001	-0.56195	4.096389	4.57E-05	0.003314	-1	294	233	263
Potri.002	-1.48547	1.312806	1.42E-06	0.000193	-1	53	33	47
Potri.T05	-0.57638	6.323684	4.46E-05	0.003255	-1	1145	1393	1181
Potri.002	-1.28948	1.616772	1.60E-06	0.000212	-1	55	52	53
Potri.002	-0.71326	3.178956	4.23E-05	0.003097	-1	141	148	141
Potri.009	-0.56834	5.525684	4.11E-05	0.003026	-1	683	761	690
Potri.005	-0.75999	3.214344	4.01E-05	0.002969	-1	158	141	148
Potri.002	-0.49515	5.464674	4.02E-05	0.002969	-1	759	576	681
Potri.007	-0.9743	4.291315	3.99E-05	0.002968	-1	270	405	321
Potri.001	-0.80805	2.41324	3.90E-05	0.00291	-1	88	80	88
Potri.010	-1.50726	1.230516	1.72E-06	0.000225	-1	36	47	42
Potri.017	-0.94864	3.286415	3.52E-05	0.002659	-1	185	110	199
Potri.008	-0.65809	8.914153	3.48E-05	0.002637	-1	8203	7057	7824
Potri.013	-0.60348	5.364709	3.47E-05	0.002637	-1	560	730	631
Potri.010	-0.52803	6.416446	3.42E-05	0.002606	-1	1402	1371	1159
Potri.014	-1.05836	3.301683	1.79E-06	0.000233	-1	148	186	174
Potri.005	-5.91741	-1.11553	1.86E-06	0.00024	-1	8	9	6
Potri.013	-1.02506	2.14368	1.89E-06	0.000244	-1	79	76	67
Potri.007	-0.52221	4.910651	3.29E-05	0.002546	-1	474	418	485
Potri.008	-1.13513	2.379356	1.91E-06	0.000245	-1	106	80	84
Potri.011	-0.9941	2.614251	3.21E-05	0.002498	-1	141	72	98

Potri.006	-1.12559	4.1793	2.02E-06	0.000256	-1	235	379	337
Potri.017	-1.77243	1.961314	2.27E-06	0.000286	-1	47	103	72
Potri.007	-0.71259	5.324201	3.13E-05	0.002445	-1	561	726	636
Potri.014	-0.7715	6.525677	3.11E-05	0.00244	-1	1481	1328	1715
Potri.009	-2.21168	0.353832	2.65E-06	0.000326	-1	23	17	31
Potri.019	-0.56209	4.969769	2.88E-05	0.002276	-1	466	510	471
Potri.004	-1.14755	3.958255	2.80E-06	0.00034	-1	409	236	190
Potri.001	-1.32983	1.260367	2.93E-06	0.000353	-1	42	38	44
Potri.002	-1.18194	2.393768	3.07E-06	0.000368	-1	86	113	75
Potri.002	-1.1342	1.876436	3.08E-06	0.000368	-1	56	64	67
Potri.019	-1.36685	1.397053	3.46E-06	0.000405	-1	45	56	37
Potri.008	-0.66695	3.951674	2.52E-05	0.002045	-1	248	248	236
Potri.015	-1.42592	1.101525	3.63E-06	0.000422	-1	35	43	34
Potri.004	-1.04601	4.13805	3.65E-06	0.000422	-1	443	190	294
Potri.004	-2.96626	-0.544	4.12E-06	0.000464	-1	11	15	10
Potri.001	-0.48413	5.782281	2.44E-05	0.002014	-1	871	846	781
Potri.014	-1.11453	2.543277	4.21E-06	0.000473	-1	127	71	105
Potri.018	-0.57081	4.160259	2.33E-05	0.001939	-1	283	264	279
Potri.004	-0.45979	8.518899	2.33E-05	0.001938	-1	5792	5156	5642
Potri.001	-0.54976	4.871831	2.29E-05	0.00192	-1	466	438	446
Potri.010	-1.30725	1.607983	4.44E-06	0.000496	-1	67	52	41
Potri.006	-0.92868	2.748867	2.22E-05	0.001871	-1	103	113	118
Potri.012	-0.68774	3.903128	2.22E-05	0.001871	-1	265	193	256
Potri.008	-0.5279	6.416613	2.08E-05	0.001765	-1	1319	1430	1175
Potri.006	-0.8525	2.942446	1.93E-05	0.001652	-1	111	127	138
Potri.004	-0.63226	4.003632	1.93E-05	0.001652	-1	252	252	248
Potri.008	-0.70146	3.16113	1.90E-05	0.001634	-1	148	133	143
Potri.004	-0.67759	3.654733	1.83E-05	0.001581	-1	209	176	212
Potri.010	-1.21689	4.890178	5.22E-06	0.000567	-1	363	654	573
Potri.002	-0.54215	4.643873	1.77E-05	0.00154	-1	411	378	361
Potri.002	-1.13043	1.94376	5.40E-06	0.000582	-1	57	74	65
Potri.005	-2.58858	-0.05375	6.03E-06	0.000635	-1	11	24	18
Potri.019	-0.78849	3.422752	1.57E-05	0.001398	-1	216	137	171
Potri.002	-0.79686	3.300972	1.43E-05	0.001281	-1	144	158	176
Potri.008	-1.63217	0.560878	8.21E-06	0.000824	-1	28	27	22
Potri.007	-0.97186	6.028766	1.34E-05	0.001208	-1	845	1342	1147
Potri.003	-0.49397	7.255287	1.33E-05	0.001205	-1	2622	2021	2350
Potri.013	-0.74385	4.10534	1.32E-05	0.001196	-1	363	257	218
Potri.001	-0.50673	6.64245	1.31E-05	0.001191	-1	1585	1532	1453
Potri.002	-0.95283	2.371896	1.29E-05	0.001178	-1	103	73	82
Potri.007	-1.37689	1.109266	9.03E-06	0.000888	-1	45	31	36
Potri.006	-0.80242	2.78556	1.26E-05	0.00116	-1	125	93	116
Potri.001	-0.79479	3.241011	1.26E-05	0.001156	-1	156	152	151
Potri.002	-0.80174	3.090196	1.22E-05	0.001123	-1	148	123	143
Potri.015	-0.91693	2.963801	1.21E-05	0.001115	-1	110	156	121
Potri.001	-0.82224	3.163225	1.21E-05	0.001115	-1	165	110	164
Potri.005	-1.3125	1.859122	9.36E-06	0.00091	-1	48	68	75
Potri.011	-0.49131	5.873835	1.16E-05	0.001082	-1	964	873	834
Potri.019	-2.88557	-0.60102	9.51E-06	0.00092	-1	10	9	15
Potri.001	-0.63718	5.290515	1.10E-05	0.001027	-1	769	591	502
Potri.018	-1.91472	0.450021	9.99E-06	0.000952	-1	36	15	23
Potri.006	-0.59197	5.156244	1.08E-05	0.001012	-1	655	525	492
Potri.003	-1.00448	2.090178	1.04E-05	0.000984	-1	84	70	59
Potri.014	-1.20073	1.532929	1.08E-05	0.001015	-1	54	41	53

Potri.011	-0.87764	3.08206	9.92E-06	0.000947	-1	177	120	124
Potri.004	-0.96946	3.339124	9.85E-06	0.000946	-1	127	170	213
Potri.003	-0.8864	3.667253	9.89E-06	0.000946	-1	181	244	206
Potri.019	-0.63282	4.850596	9.75E-06	0.000941	-1	506	389	470
Potri.014	-1.31084	2.194533	1.10E-05	0.00103	-1	63	108	72
Potri.010	-1.25987	1.895245	1.16E-05	0.001082	-1	48	69	77
Potri.013	-0.97462	4.996132	9.27E-06	0.000903	-1	592	565	486
Potri.016	-0.78437	2.917517	9.25E-06	0.000903	-1	120	121	123
Potri.011	-0.88768	3.711531	9.12E-06	0.000892	-1	303	193	164
Potri.009	-0.60024	6.418584	9.11E-06	0.000892	-1	1352	1448	1210
Potri.001	-1.27653	1.389494	1.27E-05	0.001161	-1	43	36	56
Potri.005	-0.52822	5.247956	8.90E-06	0.000877	-1	588	573	582
Potri.010	-0.59619	4.666745	8.67E-06	0.000862	-1	434	380	373
Potri.002	-0.76727	6.419735	8.39E-06	0.000837	-1	1234	1330	1620
Potri.010	-2.63127	-0.54423	1.43E-05	0.00128	-1	10	13	12
Potri.002	-0.80196	5.847191	8.05E-06	0.000809	-1	1023	912	916
Potri.011	-1.1034	2.607957	1.43E-05	0.00128	-1	77	118	118
Potri.004	-1.3047	1.302025	1.59E-05	0.00141	-1	37	48	42
Potri.004	-0.8293	5.811825	6.80E-06	0.000697	-1	750	1092	933
Potri.007	-0.63465	3.967555	6.46E-06	0.000673	-1	248	250	236
Potri.018	-1.05274	2.751579	1.69E-05	0.001485	-1	106	134	104
Potri.001	-0.97827	3.169961	5.89E-06	0.000624	-1	141	175	139
Potri.010	-0.61436	5.306756	5.79E-06	0.000617	-1	650	623	588
Potri.010	-0.54821	6.453177	5.66E-06	0.000608	-1	1271	1409	1362
Potri.012	-0.79176	2.982573	5.49E-06	0.000591	-1	144	120	119
Potri.009	-1.07793	2.978093	1.72E-05	0.001501	-1	108	170	127
Potri.008	-0.69611	5.981349	4.88E-06	0.000534	-1	1285	779	1002
Potri.010	-0.80785	3.451392	4.80E-06	0.000527	-1	188	157	190
Potri.005	-0.49454	7.551986	4.72E-06	0.00052	-1	2884	2786	2887
Potri.006	-0.78506	5.045792	4.71E-06	0.00052	-1	711	418	508
Potri.002	-0.58163	6.121173	4.54E-06	0.000503	-1	1307	895	1067
Potri.012	-0.88689	3.038988	4.51E-06	0.000501	-1	123	144	139
Potri.T16	-4.00788	-1.07524	2.24E-05	0.001876	-1	9	9	5
Potri.010	-0.84388	2.806642	4.26E-06	0.000477	-1	124	113	105
Potri.008	-1.49634	0.624521	2.45E-05	0.002021	-1	26	26	27
Potri.013	-0.48965	9.560726	4.00E-06	0.000455	-1	12079	10905	11477
Potri.011	-0.83459	3.565951	3.94E-06	0.00045	-1	252	156	179
Potri.010	-1.74895	0.262042	2.47E-05	0.002025	-1	22	20	20
Potri.009	-0.65071	5.839315	3.71E-06	0.000426	-1	1145	806	790
Potri.005	-0.53521	6.367033	3.70E-06	0.000426	-1	1241	1299	1258
Potri.016	-1.4077	0.951807	2.48E-05	0.002037	-1	40	36	24
Potri.004	-1.11312	2.045407	2.49E-05	0.002039	-1	98	62	52
Potri.006	-2.33619	1.504841	2.51E-05	0.002045	-1	67	68	38
Potri.002	-1.3295	1.169068	2.52E-05	0.002045	-1	46	43	27
Potri.001	-1.53774	2.348601	2.71E-05	0.002179	-1	70	119	94
Potri.004	-1.94835	1.735985	2.73E-05	0.002187	-1	34	107	52
Potri.016	-1.04324	3.040725	2.81E-05	0.002237	-1	123	164	134
Potri.003	-1.24835	1.23633	2.87E-05	0.002274	-1	46	43	31
Potri.018	-0.61351	5.231204	2.68E-06	0.000327	-1	590	510	665
Potri.006	-4.00124	-1.07632	3.10E-05	0.002436	-1	12	6	5
Potri.001	-0.49736	6.742809	2.64E-06	0.000326	-1	1740	1538	1615
Potri.016	-0.6171	6.944742	2.49E-06	0.000308	-1	1936	1943	1928
Potri.006	-0.87064	3.504264	2.47E-06	0.000306	-1	204	176	184
Potri.017	-1.91247	0.306669	3.14E-05	0.002451	-1	29	13	24

Potri.002	-1.63641	0.383082	3.20E-05	0.002494	-1	21	22	24
Potri.010	-0.57923	5.471732	2.01E-06	0.000256	-1	816	611	650
Potri.008	-0.53798	6.877833	2.00E-06	0.000255	-1	1796	1744	1884
Potri.009	-1.04324	2.908734	3.24E-05	0.002515	-1	181	114	93
Potri.006	-0.69206	4.4656	1.90E-06	0.000244	-1	381	331	346
Potri.002	-1.51245	1.131792	3.38E-05	0.002585	-1	27	48	41
Potri.019	-1.63289	0.441463	4.22E-05	0.003097	-1	18	24	28
Potri.002	-0.90149	3.129557	1.54E-06	0.000206	-1	173	138	126
Potri.002	-0.68999	3.891161	1.50E-06	0.000201	-1	265	215	228
Potri.001	-0.82292	3.440419	1.46E-06	0.000198	-1	177	173	182
Potri.019	-1.27682	1.254077	4.52E-05	0.003296	-1	36	36	50
Potri.015	-1.86098	0.324279	4.53E-05	0.0033	-1	16	28	22
Potri.005	-1.30999	1.384681	4.56E-05	0.003312	-1	37	56	42
Potri.014	-0.67851	6.054964	1.33E-06	0.000182	-1	1374	913	925
Potri.012	-1.29413	1.233997	4.73E-05	0.003407	-1	46	28	47
Potri.004	-0.57524	6.201165	1.26E-06	0.000176	-1	1257	966	1216
Potri.018	-1.73519	0.246635	4.86E-05	0.003476	-1	17	25	19
Potri.012	-1.08738	6.406832	4.89E-05	0.003483	-1	988	1909	1539
Potri.016	-0.71134	5.909298	1.22E-06	0.000172	-1	1021	981	903
Potri.001	-0.95512	3.063317	1.17E-06	0.000167	-1	127	130	163
Potri.009	-0.56398	7.197263	1.15E-06	0.000165	-1	2148	2334	2325
Potri.015	-2.93066	-0.85263	5.19E-05	0.003652	-1	10	9	8
Potri.001	-2.64354	-0.33865	5.82E-05	0.004016	-1	12	7	23
Potri.007	-0.53861	9.579096	9.64E-07	0.000142	-1	11803	11890	11630
Potri.017	-0.67689	5.511981	9.21E-07	0.000137	-1	861	650	682
Potri.014	-1.21168	1.508555	5.98E-05	0.004113	-1	37	48	60
Potri.017	-0.65637	4.548705	8.08E-07	0.000123	-1	437	324	353
Potri.001	-0.97416	6.029428	7.76E-07	0.000118	-1	902	1297	1144
Potri.004	-1.08339	1.585227	6.70E-05	0.004491	-1	56	52	42
Potri.010	-1.73882	0.324406	7.02E-05	0.004661	-1	19	16	30
Potri.010	-0.84061	4.070334	6.48E-07	0.000102	-1	314	219	302
Potri.001	-0.91616	3.010772	6.27E-07	9.90E-05	-1	157	122	124
Potri.016	-2.25633	-0.43817	7.06E-05	0.004672	-1	12	15	10
Potri.001	-0.53862	7.015724	4.93E-07	8.08E-05	-1	2233	1837	1924
Potri.001	-1.73687	0.247019	7.35E-05	0.0048	-1	15	22	24
Potri.009	-0.59484	6.413811	4.77E-07	7.89E-05	-1	1451	1258	1295
Potri.001	-1.4818	0.509622	7.43E-05	0.004829	-1	21	28	23
Potri.015	-1.31197	1.961807	8.35E-05	0.005268	-1	42	89	74
Potri.006	-0.54645	7.189445	3.70E-07	6.49E-05	-1	2255	2272	2222
Potri.017	-1.79316	0.823251	8.66E-05	0.005397	-1	19	51	26
Potri.001	-1.7138	0.380301	8.76E-05	0.005431	-1	33	14	21
Potri.002	-0.60142	6.238102	3.00E-07	5.42E-05	-1	1294	1146	1110
Potri.006	-1.29499	0.8714	9.34E-05	0.005715	-1	33	34	25
Potri.014	-1.28503	1.04704	9.58E-05	0.005819	-1	39	24	42
Potri.012	-1.03014	2.605467	9.67E-05	0.005849	-1	151	89	72
Potri.019	-0.68445	8.091765	2.18E-07	4.12E-05	-1	5460	3398	4369
Potri.008	-0.63263	5.733476	1.80E-07	3.50E-05	-1	868	845	803
Potri.014	-2.04707	-0.17839	0.000108	0.006338	-1	12	22	11
Potri.002	-0.60408	6.42603	1.75E-07	3.43E-05	-1	1479	1214	1358
Potri.008	-1.23125	1.221529	0.000108	0.006349	-1	35	36	47
Potri.004	-0.73593	7.018647	1.56E-07	3.14E-05	-1	2444	1937	1962
Potri.008	-1.42306	2.767864	0.000112	0.006512	-1	70	180	122
Potri.001	-2.41269	-0.49038	0.000116	0.006644	-1	15	14	7
Potri.010	-1.56991	0.277301	0.00012	0.006867	-1	23	22	16

Potri.018	-1.66886	0.130396	0.000123	0.006997	-1	15	19	21
Potri.016	-1.06702	1.443565	0.000133	0.007443	-1	58	42	35
Potri.003	-2.85443	-0.01313	0.000139	0.0077	-1	7	30	19
Potri.008	-0.63917	6.461415	8.04E-08	1.76E-05	-1	1310	1386	1474
Potri.016	-0.75911	4.413281	7.63E-08	1.69E-05	-1	379	339	320
Potri.001	-0.9754	2.800004	7.23E-08	1.62E-05	-1	124	116	111
Potri.T02	-5.31642	-1.48883	0.000147	0.00806	-1	4	7	4
Potri.010	-0.99277	3.842518	5.85E-08	1.34E-05	-1	212	267	253
Potri.019	-0.63427	8.842316	5.45E-08	1.26E-05	-1	8676	6484	6748
Potri.001	-3.74542	-1.24369	0.00015	0.008165	-1	4	9	6
Potri.001	-2.17225	-0.48958	0.000153	0.008254	-1	10	10	15
Potri.015	-1.12086	3.074609	0.000165	0.00871	-1	243	94	110
Potri.001	-0.84924	6.274699	4.63E-08	1.10E-05	-1	1354	1225	1301
Potri.015	-0.88067	4.577392	4.32E-08	1.05E-05	-1	360	448	385
Potri.001	-0.79283	4.083285	4.34E-08	1.05E-05	-1	286	256	288
Potri.012	-0.60049	7.625639	3.97E-08	9.74E-06	-1	3178	2980	3125
Potri.005	-0.77161	5.05625	3.83E-08	9.47E-06	-1	588	476	568
Potri.008	-5.39476	-1.43806	0.000184	0.009532	-1	9	4	3
Potri.010	-5.3181	-1.48876	0.000194	0.009981	-1	4	8	3
Potri.010	-1.25931	1.369541	0.000211	0.010722	-1	35	62	35
Potri.T15	-3.66734	-1.28955	0.000223	0.011148	-1	4	8	6
Potri.008	-1.86292	0.10947	0.000225	0.011214	-1	27	10	19
Potri.008	-0.6071	6.705963	3.01E-08	7.84E-06	-1	1827	1606	1491
Potri.009	-1.04745	1.431863	0.000226	0.011256	-1	47	32	54
Potri.T07	-0.86985	3.387269	2.74E-08	7.31E-06	-1	198	155	167
Potri.008	-1.73518	0.398686	0.000229	0.011386	-1	25	26	18
Potri.003	-0.72407	4.783236	2.24E-08	6.13E-06	-1	451	459	419
Potri.002	-1.6261	0.65853	0.000247	0.012065	-1	34	36	13
Potri.010	-5.21119	-1.54437	0.000265	0.012774	-1	7	4	3
Potri.009	-0.62437	6.029115	1.55E-08	4.47E-06	-1	1078	1024	983
Potri.010	-2.56505	-0.81776	0.000272	0.013043	-1	6	11	10
Potri.013	-2.29723	-0.57225	0.000281	0.013325	-1	10	8	15
Potri.014	-1.11794	1.287278	0.000287	0.013516	-1	35	40	46
Potri.001	-1.81756	0.371985	0.000291	0.013712	-1	13	35	20
Potri.006	-0.67645	6.036515	9.22E-09	2.77E-06	-1	1165	1040	945
Potri.001	-0.83854	4.049635	7.56E-09	2.34E-06	-1	307	239	276
Potri.002	-0.94476	4.443899	7.01E-09	2.20E-06	-1	338	409	357
Potri.007	-2.25107	-0.43628	0.000293	0.013763	-1	9	12	16
Potri.001	-1.04052	1.336503	0.000306	0.014268	-1	53	38	33
Potri.013	-1.5755	0.146643	0.000322	0.014773	-1	21	17	17
Potri.009	-0.99866	4.873567	4.33E-09	1.47E-06	-1	473	499	539
Potri.003	-1.98732	-0.4646	0.000332	0.015167	-1	14	11	10
Potri.018	-0.6802	5.343605	4.16E-09	1.44E-06	-1	690	622	633
Potri.003	-1.94296	-0.24628	0.000337	0.015298	-1	14	8	20
Potri.016	-0.69125	6.017547	3.20E-09	1.18E-06	-1	1009	1037	1063
Potri.012	-0.75041	7.573216	2.96E-09	1.09E-06	-1	3864	2522	3001
Potri.017	-0.88944	4.024208	2.65E-09	9.89E-07	-1	267	291	256
Potri.001	-2.46939	-0.65892	0.000344	0.015469	-1	7	16	8
Potri.011	-1.04649	1.101579	0.000368	0.016369	-1	38	34	32
Potri.009	-1.03091	2.585886	0.000405	0.017621	-1	66	93	144
Potri.008	-0.9154	4.667412	7.54E-10	3.11E-07	-1	427	435	423
Potri.013	-1.11286	1.819942	0.000417	0.018015	-1	60	60	59
Potri.008	-1.88153	-0.07363	0.000428	0.018438	-1	12	24	12
Potri.004	-1.65583	-0.03688	0.000463	0.019654	-1	20	16	12

Potri.013	-1.19111	0.950472	0.000478	0.02004	-1	42	21	33
Potri.010	-0.97079	4.153341	3.96E-10	1.79E-07	-1	296	324	288
Potri.019	-0.91412	6.396962	3.66E-10	1.67E-07	-1	1889	1124	1317
Potri.013	-0.84192	5.68138	2.82E-10	1.35E-07	-1	989	824	758
Potri.001	-1.75497	1.132156	0.000483	0.020156	-1	31	53	37
Potri.012	-1.00703	2.186514	0.000483	0.020161	-1	56	67	104
Potri.001	-0.85923	4.969299	2.74E-10	1.32E-07	-1	507	493	565
Potri.014	-0.97808	4.548095	1.74E-10	8.70E-08	-1	378	417	403
Potri.T09	-2.16269	-0.65855	0.000496	0.020466	-1	8	12	10
Potri.002	-1.40571	0.45553	0.000515	0.021046	-1	17	25	26
Potri.009	-1.35589	0.576843	0.000524	0.021309	-1	17	29	28
Potri.018	-1.1878	1.200011	0.00053	0.021481	-1	58	29	29
Potri.006	-1.658	0.26481	0.000536	0.021684	-1	11	22	28
Potri.004	-1.80445	-0.11552	0.000541	0.021822	-1	17	14	15
Potri.014	-2.64216	-1.03375	0.000617	0.024241	-1	5	8	9
Potri.010	-1.90286	-0.3863	0.000636	0.02491	-1	12	14	11
Potri.006	-1.01221	1.676076	0.00064	0.02506	-1	61	48	49
Potri.010	-0.81492	5.705719	1.03E-11	6.25E-09	-1	878	858	851
Potri.011	-1.14012	0.880536	0.000649	0.025281	-1	37	21	32
Potri.005	-1.09486	0.954334	0.000658	0.025595	-1	31	28	35
Potri.005	-1.37263	0.384274	0.000688	0.026483	-1	20	26	18
Potri.008	-3.49266	-1.38606	0.000726	0.027654	-1	5	3	8
Potri.010	-1.87425	-0.41097	0.000777	0.029245	-1	8	15	13
Potri.003	-1.45942	0.321644	0.000784	0.029428	-1	25	21	16
Potri.011	-1.21635	0.710051	0.000792	0.029654	-1	25	28	27
Potri.005	-2.64211	-1.03449	0.000835	0.0309	-1	7	10	5
Potri.018	-1.99314	-0.6023	0.000884	0.03228	-1	14	6	11
Potri.008	-1.29373	0.757237	0.000915	0.033175	-1	20	36	28
Potri.010	-1.03155	1.353985	0.000919	0.033221	-1	40	30	55
Potri.005	-1.0059	1.18914	0.00094	0.033687	-1	37	29	44
Potri.010	-1.09825	2.221478	0.001049	0.036462	-1	52	86	99
Potri.003	-1.18805	1.141213	0.001061	0.036783	-1	55	28	28
Potri.006	-1.33382	0.308012	0.001074	0.037077	-1	26	20	14
Potri.019	-1.95865	-0.13475	0.001075	0.037082	-1	9	27	10
Potri.004	-1.1232	0.841036	0.001078	0.03715	-1	36	26	25
Potri.017	-2.94121	-1.20025	0.00111	0.037823	-1	8	8	3
Potri.002	-1.11685	0.796944	0.001112	0.03785	-1	33	19	32
Potri.011	-3.5021	-1.38597	0.001172	0.039407	-1	5	9	2
Potri.005	-1.03446	1.229319	0.001179	0.039588	-1	36	27	51
Potri.001	-1.74266	-0.48962	0.001198	0.039872	-1	10	11	12
Potri.006	-2.12308	-0.68872	0.001236	0.040569	-1	5	10	14
Potri.T17	-5.00992	-1.65814	0.001266	0.041193	-1	2	7	3
Potri.006	-1.20452	0.522737	0.001304	0.042205	-1	20	26	23
Potri.005	-1.32498	0.181878	0.001331	0.042801	-1	16	18	20
Potri.010	-1.39334	0.095728	0.001351	0.043345	-1	15	21	15
Potri.T01	-1.19943	0.52356	0.001402	0.044458	-1	21	26	22
Potri.017	-1.32692	1.336388	0.001427	0.044997	-1	57	28	47
Potri.004	-2.32841	-0.95798	0.001431	0.045063	-1	6	8	9
Potri.001	-1.4308	0.414602	0.001476	0.045971	-1	12	24	30
Potri.006	-1.11863	1.472404	0.001506	0.04657	-1	26	57	55
Potri.011	-1.41834	0.24748	0.001542	0.047275	-1	21	23	14
Potri.005	-2.20926	-0.62875	0.001604	0.048792	-1	9	17	5
Potri.001	-1.26445	1.164938	0.001602	0.048792	-1	38	50	26
Potri.017	-2.06115	-0.72157	0.001653	0.049956	-1	12	12	4

Potri.001	0.452777	3.779103	0.001651	0.049927	1	152	151	145
Potri.007	0.399344	5.045312	0.001631	0.04941	1	357	353	396
Potri.016	0.393239	5.075607	0.001623	0.049239	1	410	391	334
Potri.002	0.331392	8.048187	0.001619	0.049163	1	3439	2761	2979
Potri.005	1.574129	8.183179	9.66E-35	2.07E-30	1	2256	1831	1644
Potri.004	1.885981	4.768346	1.54E-28	1.65E-24	1	142	142	167
Potri.003	0.427972	4.376439	0.001603	0.048792	1	233	223	231
Potri.001	0.897917	1.79113	0.001599	0.048741	1	36	20	35
Potri.T09	0.625151	3.05125	0.001594	0.048663	1	93	67	91
Potri.013	0.531919	4.453812	0.001578	0.048201	1	285	166	249
Potri.014	0.385142	5.569818	0.001549	0.047423	1	597	508	503
Potri.014	0.339452	7.34508	0.001546	0.047352	1	1921	1897	1780
Potri.010	4.591356	1.307321	1.52E-28	1.65E-24	1	1	1	5
Potri.008	0.352955	8.358402	0.001542	0.047275	1	3895	3398	3965
Potri.T15	0.916757	1.222347	0.001542	0.047275	1	14	21	24
Potri.001	0.382987	5.760247	0.001538	0.047254	1	667	618	550
Potri.001	0.444605	4.146866	0.001538	0.047254	1	195	204	182
Potri.012	0.418418	6.140818	0.001521	0.046894	1	834	722	801
Potri.006	0.680397	2.872806	0.001522	0.046894	1	64	91	60
Potri.016	0.375119	5.799928	0.001509	0.046618	1	624	639	624
Potri.019	1.506338	4.324928	2.82E-23	1.73E-19	1	159	124	124
Potri.001	0.962608	0.94099	0.001499	0.046428	1	18	15	14
Potri.003	0.42403	8.086047	0.001489	0.04619	1	2984	3011	3049
Potri.011	0.680005	2.530105	0.001489	0.04619	1	52	49	68
Potri.005	0.435832	5.00973	0.001485	0.046116	1	449	307	316
Potri.001	0.582783	3.504078	0.00148	0.046018	1	124	96	131
Potri.012	1.422251	5.735009	6.67E-21	3.18E-17	1	423	429	278
Potri.002	0.369958	7.472915	0.001472	0.045895	1	1996	1971	2073
Potri.001	0.429698	5.856927	0.001457	0.045431	1	587	629	702
Potri.003	0.435659	4.89606	0.001453	0.045376	1	340	331	313
Potri.009	0.431541	4.841118	0.001449	0.045341	1	326	291	332
Potri.011	0.765219	2.509178	0.001441	0.045255	1	64	64	33
Potri.T04	0.470272	4.867264	0.001439	0.045221	1	354	271	329
Potri.012	0.403044	5.071477	0.001432	0.045063	1	363	392	369
Potri.013	1.309051	4.395954	8.29E-19	2.54E-15	1	170	160	141
Potri.013	0.488695	3.694903	0.001426	0.044997	1	137	145	134
Potri.014	0.880326	1.771705	0.001427	0.044997	1	27	29	34
Potri.010	0.365912	6.617758	0.001422	0.044952	1	1224	1057	1072
Potri.006	0.377501	5.728214	0.001422	0.044952	1	699	564	540
Potri.006	0.48723	4.303926	0.001404	0.044478	1	228	187	224
Potri.006	0.503237	3.521256	0.001399	0.044431	1	116	123	127
Potri.014	1.10746	7.197441	3.09E-18	8.31E-15	1	1346	1275	1016
Potri.009	0.335679	6.649222	0.001393	0.044325	1	1223	1094	1147
Potri.010	0.368176	6.211808	0.001392	0.044325	1	812	856	849
Potri.007	0.383587	6.942497	0.001393	0.044325	1	1487	1392	1288
Potri.019	0.547174	3.267458	0.001391	0.044325	1	101	110	90
Potri.016	1.469188	4.15084	5.99E-18	1.51E-14	1	108	131	126
Potri.008	0.353074	7.892937	0.001375	0.043948	1	2667	2820	2643
Potri.002	0.419856	5.099774	0.001365	0.043646	1	357	393	388
Potri.001	0.840638	2.080979	0.001356	0.043425	1	52	40	23
Potri.006	1.59234	4.418865	1.50E-17	3.40E-14	1	123	134	156
Potri.006	0.395762	5.640654	0.001339	0.043013	1	577	502	600
Potri.011	0.384432	9.410314	0.001329	0.042752	1	8038	7042	7984
Potri.010	0.492235	4.724016	0.001328	0.042746	1	241	304	304

Potri.006	1.208376	6.277807	3.97E-17	7.54E-14	1	694	473	669
Potri.001	0.357723	7.550933	0.001314	0.042423	1	2194	2092	2127
Potri.014	0.454242	4.609343	0.001311	0.04237	1	242	294	261
Potri.013	2.122919	3.332147	4.04E-17	7.54E-14	1	27	51	66
Potri.008	0.330655	8.480291	0.001294	0.041958	1	4608	3792	3985
Potri.003	0.424437	5.331467	0.001283	0.041608	1	506	426	410
Potri.009	1.303156	4.166692	1.88E-16	3.23E-13	1	135	130	137
Potri.014	1.805943	4.036965	2.19E-16	3.62E-13	1	84	108	90
Potri.003	0.493314	4.463943	0.001267	0.041193	1	213	252	244
Potri.016	0.381638	7.715296	0.001263	0.041153	1	2349	2569	2189
Potri.017	2.414556	2.119063	4.44E-16	6.82E-13	1	19	16	17
Potri.001	0.365672	6.23052	0.00126	0.041112	1	995	749	825
Potri.014	1.348714	3.885336	5.01E-16	7.42E-13	1	95	122	105
Potri.001	0.478603	4.295262	0.00125	0.040875	1	239	191	208
Potri.015	0.397551	5.119405	0.001244	0.040732	1	437	367	366
Potri.018	0.532966	4.201472	0.001241	0.040668	1	182	231	168
Potri.001	0.381551	5.999307	0.001238	0.040606	1	700	721	740
Potri.013	2.700747	1.293088	9.90E-16	1.37E-12	1	6	11	7
Potri.005	0.361505	7.251505	0.001236	0.040569	1	1926	1649	1641
Potri.001	0.388254	6.603889	0.001236	0.040569	1	1163	1162	961
Potri.002	0.405572	6.22026	0.001225	0.040361	1	856	895	747
Potri.015	0.785063	2.410629	0.00122	0.040267	1	54	44	51
Potri.011	0.475018	4.587244	0.001218	0.040242	1	252	257	271
Potri.005	0.945694	1.556319	0.001218	0.040242	1	31	20	24
Potri.017	0.631297	3.020163	0.001215	0.040201	1	94	71	80
Potri.002	0.754938	2.126267	0.001206	0.039998	1	43	34	46
Potri.019	0.967293	2.176073	0.001203	0.03995	1	29	44	42
Potri.019	0.545945	5.258999	0.001201	0.03994	1	475	343	399
Potri.004	1.390594	3.978307	6.19E-15	8.06E-12	1	101	95	141
Potri.001	1.401929	4.1197	7.88E-15	9.96E-12	1	147	102	123
Potri.010	0.488105	3.947327	0.001198	0.039872	1	184	158	156
Potri.003	0.359125	8.237402	0.001191	0.0398	1	3333	3500	3464
Potri.017	0.680839	3.950798	0.001181	0.039608	1	198	123	142
Potri.T10	1.031965	7.174474	1.38E-14	1.64E-11	1	1367	1346	994
Potri.006	1.860249	2.627492	1.48E-14	1.72E-11	1	29	41	32
Potri.015	0.360591	9.28061	0.001144	0.038692	1	7770	6477	7063
Potri.018	0.358558	6.213251	0.001132	0.038344	1	881	782	873
Potri.001	0.432314	7.627102	0.001123	0.038114	1	2284	1828	2464
Potri.013	0.434665	4.420175	0.001118	0.037942	1	271	200	238
Potri.T12	1.119137	4.327276	1.99E-14	2.19E-11	1	199	133	162
Potri.003	0.714954	2.180504	0.001112	0.03785	1	48	49	33
Potri.001	0.357534	7.456117	0.001108	0.037788	1	1982	1993	2023
Potri.010	0.482057	3.648668	0.001099	0.037536	1	151	131	123
Potri.010	0.816288	2.443342	0.001096	0.037523	1	65	28	58
Potri.006	0.398711	8.035484	0.001092	0.037453	1	3401	2368	3108
Potri.018	0.483892	5.718975	0.001088	0.03734	1	553	603	551
Potri.009	1.589317	4.583169	1.62E-13	1.54E-10	1	183	170	114
Potri.017	0.38167	7.098138	0.001073	0.03707	1	1473	1509	1649
Potri.011	0.518838	3.636046	0.001071	0.037034	1	141	138	116
Potri.004	0.365313	5.650322	0.001065	0.036906	1	601	536	574
Potri.002	0.491959	4.185942	0.001053	0.036534	1	181	195	209
Potri.012	0.353265	7.081593	0.001038	0.036167	1	1568	1521	1548
Potri.014	0.485251	3.832298	0.001024	0.035758	1	155	154	150
Potri.010	0.540252	3.990556	0.001018	0.035607	1	182	176	144

Potri.006	0.380875	6.956897	0.001003	0.035217	1	1423	1256	1531
Potri.009	0.392964	5.394928	0.001002	0.035217	1	479	486	450
Potri.011	0.507296	4.393614	0.001002	0.035217	1	216	200	257
Potri.011	1.072531	4.928778	5.64E-13	4.95E-10	1	314	228	226
Potri.010	0.734503	2.113047	0.000988	0.035013	1	47	31	45
Potri.002	0.369786	6.431849	0.000979	0.034755	1	998	942	996
Potri.014	0.716847	2.594026	0.000968	0.034471	1	70	46	59
Potri.010	0.422723	5.086451	0.000961	0.034295	1	400	327	404
Potri.013	0.407173	5.808473	0.000956	0.034155	1	602	640	631
Potri.T15	0.96347	1.289277	0.000949	0.033952	1	26	16	19
Potri.006	1.083573	7.480539	6.95E-13	5.86E-10	1	1782	1226	1487
Potri.004	0.466315	6.565357	0.000939	0.033674	1	953	1161	974
Potri.001	0.48874	5.424982	0.000934	0.033551	1	402	539	443
Potri.011	0.378828	6.118421	0.000925	0.03329	1	777	784	790
Potri.013	0.595917	3.251936	0.000925	0.03329	1	100	96	96
Potri.009	0.345689	8.068403	0.000923	0.033266	1	3126	2961	3136
Potri.014	0.431059	5.093975	0.000923	0.033266	1	443	346	347
Potri.T09	0.590084	2.987081	0.000923	0.033266	1	86	85	72
Potri.001	1.647527	2.300543	6.86E-13	5.86E-10	1	37	26	28
Potri.016	0.419679	6.878467	0.000917	0.033207	1	1185	1406	1318
Potri.003	1.116424	5.097493	1.04E-12	8.44E-10	1	248	287	303
Potri.007	0.667056	2.626518	0.000905	0.032817	1	75	48	60
Potri.011	0.553241	4.925446	0.000904	0.032814	1	293	259	404
Potri.008	0.36979	8.408872	0.00089	0.032472	1	3714	3784	4052
Potri.010	2.173831	1.657517	1.75E-12	1.34E-09	1	18	13	12
Potri.011	0.483562	4.726721	0.00088	0.032154	1	334	269	258
Potri.010	0.521613	3.874811	0.000878	0.032106	1	187	144	137
Potri.001	0.70638	2.368082	0.000874	0.032016	1	50	58	41
Potri.002	0.866997	1.455615	0.000874	0.032016	1	28	24	20
Potri.005	0.42525	5.70001	0.000871	0.031949	1	612	604	513
Potri.008	0.590781	2.930927	0.000864	0.031761	1	72	80	81
Potri.010	0.878702	1.461434	0.000863	0.031717	1	30	22	20
Potri.011	0.498864	3.630816	0.000855	0.031458	1	145	135	117
Potri.018	0.403673	6.674691	0.000839	0.03095	1	1138	1134	1154
Potri.005	0.538155	4.233637	0.000838	0.03095	1	178	201	214
Potri.003	0.364787	8.639643	0.000836	0.030901	1	4491	4684	4411
Potri.013	0.474356	6.529862	0.000833	0.03086	1	955	1067	985
Potri.013	0.448935	5.00264	0.000826	0.030602	1	390	359	307
Potri.005	0.437787	5.369126	0.000817	0.030339	1	439	448	477
Potri.010	0.417691	8.739681	0.000814	0.030268	1	5309	4740	4270
Potri.002	0.702798	2.297421	0.000814	0.030268	1	50	51	41
Potri.001	1.053435	5.345599	2.75E-12	1.99E-09	1	349	267	415
Potri.008	0.353775	7.431759	0.000796	0.029747	1	1985	1968	1956
Potri.007	0.376592	6.647199	0.000795	0.029742	1	1318	1040	1057
Potri.011	1.699005	3.142872	2.85E-12	2.01E-09	1	32	69	58
Potri.001	0.432116	5.133544	0.000788	0.029531	1	360	410	389
Potri.004	1.523209	2.594316	3.17E-12	2.16E-09	1	36	49	34
Potri.011	0.668442	2.7793	0.000778	0.029245	1	68	58	77
Potri.006	0.350799	8.837468	0.000775	0.029208	1	5253	5191	5236
Potri.012	0.432621	7.467332	0.000768	0.028993	1	1911	2178	1772
Potri.008	0.472392	4.749487	0.000767	0.028993	1	289	325	260
Potri.002	0.358724	8.170725	0.000757	0.028703	1	3346	3153	3353
Potri.016	0.388414	5.886369	0.000731	0.027803	1	691	627	679
Potri.006	0.437533	6.090905	0.000729	0.027736	1	925	638	708

Potri.018	0.632036	2.687348	0.000712	0.02722	1	64	65	64
Potri.012	0.397492	5.886351	0.000706	0.027064	1	707	599	686
Potri.006	0.424604	4.918064	0.000703	0.026971	1	348	317	339
Potri.016	0.426749	5.170773	0.000694	0.026649	1	413	381	402
Potri.001	0.55523	7.331455	0.000676	0.026114	1	1306	1965	1772
Potri.014	0.449733	4.713861	0.000672	0.026002	1	307	263	293
Potri.007	0.629007	5.219232	0.000671	0.025981	1	361	354	421
Potri.013	0.963724	1.218732	0.000665	0.025792	1	27	13	18
Potri.003	0.551493	3.322974	0.000661	0.025659	1	111	96	106
Potri.001	0.47671	7.254934	0.000656	0.025513	1	1883	1392	1728
Potri.004	0.436052	5.917241	0.000652	0.025396	1	699	708	594
Potri.008	0.477795	4.478563	0.000647	0.025255	1	264	207	254
Potri.009	0.661557	5.367752	0.000641	0.025061	1	313	505	416
Potri.001	1.644531	3.056134	1.09E-11	6.52E-09	1	33	57	64
Potri.012	3.873874	0.010597	1.29E-11	7.61E-09	1	0	2	2
Potri.015	0.464953	4.5529	0.000633	0.024818	1	287	221	260
Potri.001	0.475133	4.242958	0.000612	0.024032	1	204	199	211
Potri.008	0.576804	3.881871	0.000605	0.023827	1	162	162	134
Potri.011	0.37224	6.648399	0.0006	0.02364	1	1150	1104	1154
Potri.015	0.437549	5.173999	0.000594	0.023452	1	389	421	381
Potri.013	0.463193	4.669728	0.000592	0.023433	1	334	257	244
Potri.005	0.440408	9.598244	0.000583	0.023147	1	8647	8476	8532
Potri.003	1.682148	2.579024	2.09E-11	1.20E-08	1	38	34	37
Potri.004	0.392011	6.149288	0.000576	0.022931	1	795	752	844
Potri.017	0.377522	6.204594	0.000557	0.022264	1	853	814	833
Potri.007	0.569052	4.933789	0.000549	0.022035	1	253	376	321
Potri.014	0.715266	2.353442	0.00055	0.022035	1	51	50	46
Potri.003	0.717787	2.553515	0.000549	0.022035	1	70	43	57
Potri.004	1.368168	2.447354	2.84E-11	1.61E-08	1	34	44	38
Potri.013	0.509432	3.884336	0.000544	0.021896	1	153	158	160
Potri.009	0.529299	4.288445	0.000544	0.021896	1	247	191	185
Potri.013	0.53875	3.737291	0.000538	0.021747	1	139	145	136
Potri.018	0.458864	4.789359	0.000536	0.021684	1	285	311	307
Potri.004	1.358355	2.936321	4.91E-11	2.67E-08	1	68	40	58
Potri.010	0.37962	6.58094	0.000522	0.021288	1	1162	1030	1057
Potri.001	0.459215	5.264679	0.00052	0.021242	1	417	443	398
Potri.002	2.113311	1.410955	8.62E-11	4.46E-08	1	14	19	4
Potri.016	0.521063	6.867225	0.000513	0.020995	1	1463	1042	1254
Potri.009	0.58276	5.260216	0.000511	0.020931	1	333	495	358
Potri.003	0.513105	5.876288	0.000499	0.020554	1	548	730	597
Potri.005	0.488963	5.057097	0.000497	0.020517	1	400	339	341
Potri.002	2.050728	2.754744	1.41E-10	7.12E-08	1	48	13	41
Potri.001	0.371656	6.759631	0.000495	0.020448	1	1267	1210	1207
Potri.003	0.478484	4.570491	0.000491	0.020353	1	253	266	251
Potri.T12	0.884945	1.744171	0.000488	0.020278	1	29	27	32
Potri.006	0.409493	8.166672	0.000486	0.020243	1	3199	2888	3542
Potri.005	0.415951	6.205676	0.000485	0.02021	1	780	819	860
Potri.004	1.144507	3.794704	2.88E-10	1.35E-07	1	114	96	125
Potri.004	1.326267	2.416477	2.86E-10	1.35E-07	1	39	44	33
Potri.003	0.445044	4.961539	0.000482	0.020138	1	385	304	340
Potri.001	0.417121	6.401422	0.00048	0.020079	1	895	925	996
Potri.009	1.479104	2.89806	4.05E-10	1.81E-07	1	50	47	54
Potri.010	0.415332	5.662371	0.000473	0.019909	1	650	495	552
Potri.008	0.586247	6.374797	0.000472	0.019883	1	867	683	1039

Potri.006	0.377252	7.827916	0.000469	0.019828	1	2925	2270	2548
Potri.016	0.577558	4.166571	0.000466	0.01973	1	158	206	192
Potri.008	1.953578	1.217331	4.76E-10	2.09E-07	1	11	15	9
Potri.004	0.372054	7.140819	0.000456	0.019428	1	1650	1566	1583
Potri.009	0.426847	7.105002	0.000452	0.019326	1	1729	1340	1529
Potri.009	0.492277	4.110327	0.000451	0.019314	1	215	162	181
Potri.014	0.523777	5.928301	0.000448	0.019217	1	659	577	711
Potri.018	0.835255	6.688023	0.000434	0.018645	1	615	1320	912
Potri.001	0.409783	6.311947	0.000427	0.018432	1	854	915	885
Potri.006	0.482449	5.81842	0.000412	0.01785	1	570	612	647
Potri.015	1.184355	4.008206	9.63E-10	3.90E-07	1	128	153	100
Potri.008	0.466466	5.250619	0.00041	0.017803	1	387	453	400
Potri.018	0.545604	3.632107	0.000404	0.017592	1	158	118	115
Potri.011	0.531257	4.058126	0.000393	0.017208	1	189	193	146
Potri.010	0.410252	5.431301	0.000392	0.017179	1	496	449	498
Potri.004	0.469699	5.133715	0.000387	0.017048	1	349	376	417
Potri.014	0.498645	3.892198	0.000381	0.016825	1	175	153	149
Potri.014	0.506833	4.197044	0.000378	0.016687	1	208	184	196
Potri.006	0.573246	3.299414	0.000373	0.016533	1	105	92	108
Potri.002	0.4515	7.192395	0.000369	0.016377	1	1623	1654	1538
Potri.007	0.825414	2.160488	0.000365	0.01624	1	38	35	49
Potri.001	0.614754	3.237927	0.000362	0.016153	1	117	92	79
Potri.010	0.747285	2.524039	0.000362	0.016153	1	62	49	53
Potri.011	0.368054	8.166746	0.00036	0.016077	1	3488	3073	3244
Potri.003	0.854616	2.960937	0.000352	0.01575	1	65	80	67
Potri.008	0.718475	2.557839	0.000348	0.015598	1	61	48	61
Potri.013	0.396749	6.288164	0.000347	0.015566	1	911	885	834
Potri.016	0.757453	2.185391	0.000345	0.015517	1	42	38	48
Potri.015	0.679357	3.03226	0.000342	0.015414	1	89	71	82
Potri.004	0.413506	5.563949	0.000341	0.015381	1	558	518	505
Potri.010	0.417242	5.986752	0.00034	0.015371	1	713	737	664
Potri.019	0.491772	4.726769	0.00034	0.015371	1	320	283	254
Potri.008	0.466073	8.253555	0.000338	0.01532	1	3266	3581	3133
Potri.003	0.436218	5.77246	0.000337	0.015298	1	629	561	621
Potri.008	0.53808	3.95444	0.000337	0.015298	1	183	130	178
Potri.005	0.538842	5.438231	0.000334	0.015192	1	406	494	470
Potri.014	1.215104	4.779126	4.30E-09	1.47E-06	1	155	202	281
Potri.004	0.77229	2.222986	0.000331	0.015113	1	51	38	42
Potri.008	0.576597	3.757658	0.000325	0.014903	1	162	138	121
Potri.011	0.612897	4.215865	0.000324	0.014879	1	159	204	204
Potri.013	1.17666	2.483799	5.41E-09	1.80E-06	1	47	49	35
Potri.012	0.403907	5.983261	0.000321	0.014773	1	802	645	682
Potri.014	0.512021	4.136093	0.000321	0.014773	1	185	200	176
Potri.014	1.059434	3.227658	6.44E-09	2.06E-06	1	96	75	64
Potri.005	0.683452	2.979434	0.000315	0.014595	1	89	70	74
Potri.001	0.732351	2.73283	0.000315	0.014589	1	64	63	64
Potri.003	0.441681	6.066027	0.000314	0.014582	1	683	764	760
Potri.002	0.399319	6.036152	0.000313	0.014523	1	779	680	749
Potri.017	0.505384	4.041594	0.00031	0.01439	1	207	166	156
Potri.010	0.653894	2.826793	0.000309	0.01439	1	87	60	65
Potri.015	0.489853	9.550862	0.000306	0.014268	1	7545	7865	8873
Potri.004	0.421877	6.73898	0.000302	0.01411	1	1230	1121	1211
Potri.008	0.364899	9.41889	0.0003	0.014021	1	8014	7499	7846
Potri.008	0.507127	4.40572	0.000299	0.014006	1	250	200	231

Potri.005	0.92963	3.913721	0.000296	0.013889	1	87	192	118
Potri.010	0.427954	8.698427	0.000286	0.013505	1	4968	4276	4607
Potri.014	0.568116	4.347507	0.000284	0.013415	1	193	242	199
Potri.005	0.932895	1.845866	0.000282	0.013389	1	35	27	31
Potri.014	0.437847	5.973639	0.000279	0.013275	1	685	702	690
Potri.018	0.550226	4.240019	0.000273	0.013055	1	185	220	188
Potri.009	0.512772	5.209402	0.000272	0.013032	1	404	446	335
Potri.019	0.8566	2.524467	0.00027	0.012958	1	71	48	38
Potri.002	0.623793	4.087572	0.000268	0.01288	1	219	144	159
Potri.002	0.437132	5.682819	0.000267	0.012871	1	577	564	558
Potri.010	0.599384	3.015242	0.000268	0.012871	1	86	76	85
Potri.002	0.74723	2.351124	0.000265	0.012774	1	53	39	53
Potri.003	0.562497	4.750973	0.000261	0.01264	1	295	248	303
Potri.005	0.411214	6.376942	0.00026	0.012614	1	1077	870	845
Potri.001	0.476094	4.644343	0.000258	0.012517	1	310	246	259
Potri.011	0.544633	4.000386	0.000254	0.012336	1	157	178	168
Potri.006	0.538173	3.944156	0.000245	0.011987	1	153	172	160
Potri.005	0.50152	5.493455	0.000243	0.011897	1	515	495	443
Potri.018	1.299021	3.988258	1.81E-08	5.07E-06	1	118	109	128
Potri.014	0.537689	5.836482	0.000241	0.011806	1	629	521	668
Potri.005	0.392352	7.730171	0.000236	0.011654	1	2525	2312	2334
Potri.017	1.170851	2.481422	2.48E-08	6.69E-06	1	40	36	55
Potri.017	0.598333	4.237994	0.000225	0.011219	1	160	215	204
Potri.010	0.417902	6.592317	0.000222	0.011136	1	1043	1087	1085
Potri.010	0.401511	7.104893	0.00022	0.011063	1	1560	1483	1582
Potri.014	0.499522	6.38417	0.00022	0.011063	1	892	1020	780
Potri.015	0.584047	4.844092	0.00022	0.011063	1	273	347	270
Potri.004	0.548275	4.245746	0.000213	0.010825	1	189	225	182
Potri.001	0.646784	4.457837	0.000211	0.010722	1	188	275	198
Potri.001	0.447768	5.041034	0.000209	0.010648	1	370	364	349
Potri.001	0.654147	3.362225	0.000204	0.010422	1	92	121	94
Potri.015	0.412207	8.55983	0.000201	0.010267	1	4459	4215	3972
Potri.004	0.819551	2.045405	0.0002	0.010244	1	47	34	32
Potri.013	1.429892	3.453524	3.40E-08	8.54E-06	1	55	115	57
Potri.013	0.504702	5.050641	0.000194	0.009981	1	343	357	364
Potri.009	0.596565	3.731915	0.000193	0.009918	1	126	143	139
Potri.008	0.46604	7.40018	0.000191	0.009847	1	1747	1860	1913
Potri.003	0.624865	4.902444	0.000191	0.009847	1	310	338	266
Potri.002	1.866223	0.806414	3.77E-08	9.42E-06	1	13	8	6
Potri.004	0.854937	1.844672	0.000174	0.009137	1	33	31	32
Potri.010	0.996241	2.268434	0.000172	0.009027	1	38	52	32
Potri.001	1.807077	2.044657	4.50E-08	1.08E-05	1	18	33	18
Potri.013	0.596446	3.649077	0.000164	0.008659	1	136	138	112
Potri.003	0.673304	6.57688	0.000161	0.008531	1	1173	760	956
Potri.001	0.464471	6.936235	0.000161	0.008524	1	1391	1359	1264
Potri.008	0.587305	4.15357	0.000159	0.008456	1	209	164	180
Potri.005	0.487298	5.375106	0.000158	0.008439	1	465	457	423
Potri.002	0.44091	10.73989	0.000157	0.008405	1	20123	17258	19345
Potri.008	0.521554	5.574727	0.000157	0.008405	1	573	405	552
Potri.001	0.563243	9.416116	0.000157	0.008405	1	6668	8151	6615
Potri.014	0.781881	6.229861	0.000157	0.008405	1	510	893	725
Potri.003	0.566342	5.053538	0.000156	0.008383	1	343	307	391
Potri.011	0.431127	8.419147	0.00015	0.008156	1	3948	3754	3678
Potri.014	0.786005	2.384515	0.00015	0.008156	1	52	37	57

Potri.016	1.332625	2.229572	6.78E-08	1.54E-05	1	47	22	33
Potri.003	0.727536	4.582709	0.000147	0.008053	1	324	156	229
Potri.002	1.380237	2.168092	6.87E-08	1.55E-05	1	39	32	24
Potri.006	0.911964	2.512193	0.000142	0.00784	1	51	37	63
Potri.018	0.531021	3.866443	0.00014	0.007747	1	162	145	155
Potri.010	0.444224	5.628315	0.000135	0.007472	1	613	537	486
Potri.001	0.523858	4.027918	0.000134	0.007472	1	187	168	164
Potri.004	2.097763	0.762528	8.45E-08	1.84E-05	1	12	7	4
Potri.010	0.642759	4.283066	0.00013	0.007316	1	228	220	143
Potri.001	1.566473	1.362085	1.22E-07	2.55E-05	1	18	9	21
Potri.006	0.497026	5.916648	0.000128	0.007229	1	604	717	624
Potri.009	0.663261	3.844056	0.000128	0.007221	1	136	172	121
Potri.005	0.423756	5.87862	0.000127	0.00719	1	701	599	661
Potri.019	0.489437	5.909619	0.000126	0.007161	1	638	684	623
Potri.012	1.829029	0.831006	1.28E-07	2.64E-05	1	8	11	9
Potri.001	0.545504	6.194318	0.000123	0.006997	1	704	857	750
Potri.009	0.590242	4.90983	0.00012	0.006887	1	329	244	362
Potri.008	0.468141	6.239946	0.000119	0.006804	1	845	840	786
Potri.011	0.421061	6.637059	0.000117	0.006721	1	1155	1118	1046
Potri.003	0.505143	4.961525	0.000116	0.006644	1	339	343	319
Potri.015	0.601946	5.306915	0.000114	0.006569	1	457	296	476
Potri.001	0.814917	4.48763	0.000113	0.006532	1	280	156	201
Potri.004	1.555424	1.517432	1.55E-07	3.14E-05	1	19	19	16
Potri.005	0.442141	6.097579	0.000112	0.006499	1	858	668	745
Potri.010	0.686777	4.312175	0.000111	0.006459	1	251	142	202
Potri.019	0.421916	6.751264	0.00011	0.006406	1	1321	1104	1175
Potri.006	0.411116	9.127985	0.000108	0.006349	1	6635	5975	6158
Potri.015	2.55174	0.285522	1.76E-07	3.43E-05	1	3	6	3
Potri.002	1.665896	1.222537	1.95E-07	3.73E-05	1	15	20	6
Potri.009	0.562323	5.489876	0.000105	0.00622	1	496	402	517
Potri.015	0.80007	2.355327	0.000105	0.006209	1	49	41	52
Potri.001	0.431516	6.237034	0.000103	0.006159	1	893	823	790
Potri.002	0.534797	4.163427	0.000103	0.006159	1	204	181	183
Potri.009	0.677233	3.611712	0.000103	0.006159	1	134	127	103
Potri.006	0.764131	3.300169	0.000104	0.006159	1	108	84	90
Potri.007	0.622637	3.571014	0.000103	0.006147	1	149	110	104
Potri.003	0.482309	5.807377	0.000102	0.006109	1	739	516	576
Potri.014	0.474778	5.053428	9.94E-05	0.005981	1	390	369	323
Potri.014	0.572474	4.379669	9.93E-05	0.005981	1	268	195	190
Potri.018	0.491285	6.544314	9.75E-05	0.005879	1	1017	1052	953
Potri.011	0.49975	6.193739	9.75E-05	0.005879	1	872	801	695
Potri.009	0.428868	7.699385	9.61E-05	0.005819	1	2388	2304	2221
Potri.013	0.463704	6.293571	9.55E-05	0.005807	1	823	908	833
Potri.009	0.709677	4.219195	9.52E-05	0.005802	1	177	149	222
Potri.001	0.490762	5.307058	9.45E-05	0.005763	1	462	417	404
Potri.007	0.579898	4.28217	9.36E-05	0.005716	1	214	169	223
Potri.015	0.526182	5.83415	8.95E-05	0.005515	1	604	638	577
Potri.009	0.496155	5.508836	8.83E-05	0.00545	1	465	523	479
Potri.004	1.068642	3.34319	3.50E-07	6.21E-05	1	74	80	98
Potri.010	0.596111	3.880543	8.67E-05	0.005397	1	166	122	167
Potri.014	1.224587	3.60906	3.58E-07	6.33E-05	1	58	102	120
Potri.006	0.725828	3.509005	8.48E-05	0.005309	1	100	137	93
Potri.012	0.621414	3.416599	8.43E-05	0.005288	1	117	92	116
Potri.003	0.585213	5.299015	8.41E-05	0.005283	1	383	487	351

Potri.013	0.503894	6.285602	8.26E-05	0.005235	1	771	886	849
Potri.001	0.481387	5.070261	8.20E-05	0.00521	1	383	375	333
Potri.016	0.545251	5.539262	8.19E-05	0.00521	1	564	443	471
Potri.007	0.570421	3.959921	8.18E-05	0.00521	1	179	143	164
Potri.009	0.532368	4.381339	7.94E-05	0.005072	1	236	203	223
Potri.013	0.453424	7.431134	7.69E-05	0.004947	1	2138	1788	1775
Potri.014	0.881839	2.083408	7.69E-05	0.004947	1	47	35	31
Potri.001	1.970611	0.67842	4.14E-07	7.00E-05	1	9	6	8
Potri.010	0.46297	6.301856	7.59E-05	0.004905	1	896	872	818
Potri.T07	0.766202	2.876006	7.49E-05	0.004858	1	82	63	64
Potri.012	0.513016	5.929205	7.38E-05	0.004811	1	586	663	700
Potri.012	0.574282	5.438353	7.31E-05	0.004783	1	446	494	414
Potri.005	0.482065	9.350557	7.23E-05	0.004747	1	6821	7453	6934
Potri.015	0.857361	2.654572	7.23E-05	0.004747	1	75	53	44
Potri.017	0.490713	4.650171	7.18E-05	0.004733	1	303	253	257
Potri.016	0.581455	3.803649	7.19E-05	0.004733	1	165	126	143
Potri.006	0.513294	6.939333	7.06E-05	0.004672	1	1485	1167	1306
Potri.013	1.281626	2.261207	6.88E-07	0.000108	1	28	29	49
Potri.006	0.71698	3.098252	6.83E-05	0.004551	1	82	78	89
Potri.004	0.441284	8.158738	6.72E-05	0.004497	1	3317	2937	3215
Potri.008	1.024784	2.678576	7.10E-07	0.00011	1	48	64	49
Potri.009	0.578482	3.893613	6.69E-05	0.004491	1	179	132	152
Potri.002	0.435473	7.086488	6.64E-05	0.004469	1	1682	1317	1523
Potri.010	0.625783	4.396234	6.42E-05	0.004349	1	189	244	207
Potri.006	0.584004	4.338763	6.11E-05	0.004169	1	201	227	199
Potri.009	0.885876	3.92364	6.04E-05	0.004138	1	108	162	140
Potri.010	0.482504	5.915652	5.87E-05	0.004037	1	745	545	680
Potri.T09	0.974996	2.510547	5.82E-05	0.004016	1	52	44	51
Potri.018	0.504742	5.283986	5.65E-05	0.003915	1	418	447	387
Potri.001	0.529609	6.166571	5.52E-05	0.003831	1	759	803	726
Potri.003	0.788922	7.346334	5.46E-05	0.003794	1	1152	1962	1491
Potri.004	0.99788	4.709529	5.35E-05	0.003722	1	296	172	216
Potri.006	1.605001	1.794669	1.02E-06	0.000149	1	15	33	16
Potri.005	1.337761	2.493063	1.07E-06	0.000156	1	41	36	45
Potri.014	0.578346	4.117608	5.08E-05	0.003597	1	189	176	175
Potri.006	0.619749	4.253755	5.08E-05	0.003597	1	193	185	205
Potri.018	0.642177	4.363848	5.08E-05	0.003597	1	203	220	200
Potri.006	1.593324	2.979732	1.19E-06	0.000169	1	57	36	58
Potri.011	0.842869	3.023052	4.88E-05	0.003482	1	66	76	81
Potri.T02	1.070686	2.31681	1.31E-06	0.000181	1	39	51	32
Potri.005	0.562517	4.934894	4.78E-05	0.003438	1	306	349	303
Potri.012	2.968527	-0.43186	1.32E-06	0.000182	1	3	1	1
Potri.006	0.808398	2.574704	4.67E-05	0.003371	1	71	49	46
Potri.018	1.76164	0.582888	1.35E-06	0.000185	1	9	10	5
Potri.019	1.663274	0.849964	1.38E-06	0.000188	1	10	15	6
Potri.014	0.4318	6.962008	4.23E-05	0.003097	1	1556	1287	1310
Potri.003	0.711347	4.369904	4.09E-05	0.003012	1	251	167	194
Potri.014	0.709614	3.013388	4.07E-05	0.003004	1	74	84	77
Potri.008	0.560288	5.68733	4.00E-05	0.002969	1	495	587	534
Potri.013	0.863441	2.759221	3.96E-05	0.002946	1	46	68	69
Potri.013	0.595559	4.670609	3.89E-05	0.00291	1	252	301	233
Potri.005	0.653488	3.453069	3.90E-05	0.00291	1	106	117	105
Potri.006	0.672234	3.497479	3.77E-05	0.002824	1	109	100	127
Potri.008	0.418131	8.870749	3.72E-05	0.002796	1	5595	4950	5120

Potri.014	0.754381	3.203291	3.53E-05	0.002659	1	89	75	100
Potri.012	0.510321	6.134953	3.50E-05	0.002643	1	714	759	781
Potri.001	0.5732	5.439324	3.48E-05	0.002637	1	501	483	376
Potri.007	0.619756	7.082529	3.40E-05	0.002592	1	1211	1635	1297
Potri.009	0.482667	6.966715	3.37E-05	0.00258	1	1275	1394	1389
Potri.006	0.557292	5.017406	3.35E-05	0.00257	1	326	365	326
Potri.T00	0.644822	3.889743	3.34E-05	0.002569	1	157	139	152
Potri.007	0.470095	7.148335	3.32E-05	0.002558	1	1542	1448	1647
Potri.001	0.478013	8.48924	3.24E-05	0.002515	1	3900	4064	3741
Potri.005	0.539118	5.122583	3.11E-05	0.00244	1	446	308	357
Potri.001	0.719771	3.519537	2.98E-05	0.002349	1	135	91	110
Potri.014	0.98539	2.285671	2.94E-05	0.002319	1	40	49	35
Potri.006	0.497241	5.719551	2.85E-05	0.002266	1	587	575	540
Potri.004	0.542924	4.659701	2.81E-05	0.002237	1	283	258	259
Potri.001	0.800196	4.21518	2.80E-05	0.002236	1	202	129	197
Potri.001	0.536277	6.907206	2.75E-05	0.002196	1	1325	1081	1420
Potri.016	0.561831	5.241539	2.69E-05	0.002163	1	358	406	421
Potri.005	0.855954	3.450504	2.62E-05	0.002115	1	82	115	102
Potri.006	0.500677	5.221102	2.58E-05	0.002087	1	432	365	407
Potri.007	0.635169	5.220669	2.56E-05	0.002072	1	323	447	360
Potri.013	0.463471	7.41792	2.55E-05	0.002068	1	1900	1900	1805
Potri.014	1.56496	0.932387	3.49E-06	0.000408	1	18	8	9
Potri.014	0.516654	7.285768	2.52E-05	0.002045	1	1952	1450	1631
Potri.003	1.065518	1.87097	3.78E-06	0.000433	1	32	25	32
Potri.018	0.479511	7.142851	2.46E-05	0.002024	1	1569	1445	1591
Potri.002	0.542527	5.338238	2.34E-05	0.001942	1	404	434	441
Potri.016	0.648359	4.641332	2.33E-05	0.001938	1	259	269	227
Potri.012	0.604393	5.414095	2.32E-05	0.001936	1	400	490	422
Potri.002	0.854925	2.880068	2.23E-05	0.001874	1	68	62	71
Potri.009	0.958524	2.094333	2.17E-05	0.001838	1	44	33	33
Potri.008	0.563573	6.869962	2.12E-05	0.001794	1	1141	1351	1176
Potri.001	0.507613	5.569049	2.06E-05	0.001756	1	542	501	485
Potri.007	0.636551	4.559169	2.07E-05	0.001756	1	209	250	255
Potri.001	0.889653	2.992651	1.94E-05	0.001652	1	70	73	71
Potri.009	0.50014	5.243756	1.89E-05	0.001624	1	426	396	400
Potri.002	0.629985	6.569268	1.87E-05	0.001611	1	1035	901	975
Potri.003	0.455269	9.420116	1.81E-05	0.00157	1	7454	7603	7467
Potri.012	0.50745	6.528601	1.74E-05	0.001518	1	1055	923	999
Potri.012	0.567155	5.827308	1.73E-05	0.001509	1	636	615	533
Potri.012	0.513748	5.334047	1.70E-05	0.001488	1	470	395	431
Potri.013	0.534304	5.201606	1.69E-05	0.001485	1	437	348	388
Potri.T01	0.682868	5.49821	1.67E-05	0.00147	1	530	406	421
Potri.006	0.668007	6.379124	1.63E-05	0.001437	1	857	983	663
Potri.007	0.823691	4.417879	1.59E-05	0.001411	1	190	259	148
Potri.001	1.028422	6.339934	6.91E-06	0.000705	1	515	961	579
Potri.014	0.560526	5.004431	1.48E-05	0.001317	1	343	310	356
Potri.003	1.003412	2.225195	7.34E-06	0.000748	1	37	36	45
Potri.001	1.163527	2.061858	8.02E-06	0.000809	1	26	32	39
Potri.001	0.546731	5.224015	1.39E-05	0.001249	1	409	401	372
Potri.014	0.669176	4.550684	1.38E-05	0.001247	1	266	217	222
Potri.012	0.734508	5.93996	1.29E-05	0.001178	1	498	742	543
Potri.003	0.602275	5.094114	1.19E-05	0.001104	1	374	361	321
Potri.015	0.505534	6.51433	1.07E-05	0.001012	1	970	1032	939
Potri.008	0.546186	7.085225	1.04E-05	0.000984	1	1612	1289	1419

Potri.017	1.18499	3.018621	1.04E-05	0.000984	1	82	37	73
Potri.018	0.582757	6.50895	1.01E-05	0.000962	1	883	1084	865
Potri.004	0.827749	3.893578	9.87E-06	0.000946	1	104	151	157
Potri.001	0.903522	3.415256	9.82E-06	0.000946	1	90	117	79
Potri.010	0.613786	6.953209	9.50E-06	0.00092	1	1225	1498	1084
Potri.014	0.542691	6.903925	8.84E-06	0.000873	1	1211	1385	1195
Potri.004	0.591571	5.04312	8.71E-06	0.000862	1	394	303	330
Potri.002	0.864	7.432394	8.69E-06	0.000862	1	1153	1972	1602
Potri.004	0.60662	4.807921	8.35E-06	0.000836	1	290	274	299
Potri.013	0.798832	5.157561	8.37E-06	0.000836	1	299	391	319
Potri.017	0.55476	5.181967	8.04E-06	0.000809	1	364	381	397
Potri.017	0.616913	4.967373	7.89E-06	0.000799	1	290	342	325
Potri.011	0.797354	2.940422	7.42E-06	0.000753	1	70	79	66
Potri.004	1.692012	0.632118	1.47E-05	0.001317	1	14	10	2
Potri.008	0.707553	4.755209	6.88E-06	0.000704	1	283	208	308
Potri.004	0.790802	4.516605	6.76E-06	0.000695	1	199	228	222
Potri.002	0.462894	7.266368	6.67E-06	0.000687	1	1840	1582	1639
Potri.002	0.471667	7.373167	6.66E-06	0.000687	1	1858	1700	1863
Potri.005	0.494577	7.126896	6.61E-06	0.000684	1	1632	1479	1422
Potri.006	0.584493	4.959733	6.61E-06	0.000684	1	344	325	300
Potri.006	0.929966	4.488131	6.53E-06	0.000679	1	233	137	233
Potri.005	0.8859	2.579631	6.39E-06	0.000668	1	47	54	59
Potri.007	0.752355	3.355161	6.24E-06	0.000653	1	101	96	97
Potri.008	0.610595	4.406739	6.16E-06	0.000647	1	218	229	204
Potri.001	0.707213	6.579802	5.96E-06	0.000629	1	764	1096	952
Potri.001	0.496566	6.832116	5.91E-06	0.000625	1	1313	1215	1162
Potri.001	0.51275	6.153491	5.85E-06	0.000622	1	784	724	779
Potri.002	0.543862	5.407209	5.75E-06	0.000614	1	455	433	456
Potri.009	0.662854	4.060452	5.73E-06	0.000613	1	191	154	157
Potri.010	0.984428	2.733993	5.31E-06	0.000574	1	76	44	52
Potri.009	0.585436	4.995533	5.26E-06	0.00057	1	336	326	330
Potri.004	1.233569	1.397149	1.83E-05	0.001581	1	19	20	19
Potri.014	0.550951	5.06178	5.18E-06	0.000565	1	364	359	331
Potri.003	0.699018	6.800049	5.08E-06	0.000555	1	1015	1254	1030
Potri.005	0.835975	3.956708	4.55E-06	0.000503	1	131	125	175
Potri.011	0.566079	6.106496	4.26E-06	0.000477	1	844	632	699
Potri.004	2.106492	0.062683	2.36E-05	0.001951	1	5	4	4
Potri.001	0.466772	7.820235	4.08E-06	0.000461	1	2595	2375	2440
Potri.001	0.566291	5.865582	4.06E-06	0.000461	1	727	520	594
Potri.006	0.571194	5.660598	4.07E-06	0.000461	1	522	490	572
Potri.003	0.676997	4.285084	3.69E-06	0.000426	1	188	212	181
Potri.014	0.622866	5.219058	3.58E-06	0.000417	1	387	376	378
Potri.009	0.513513	7.975802	3.44E-06	0.000404	1	2669	2801	2610
Potri.008	0.546057	5.344242	3.41E-06	0.000402	1	452	438	396
Potri.019	0.499173	6.715776	3.40E-06	0.000401	1	1232	1078	1093
Potri.001	0.522728	7.039502	3.34E-06	0.000395	1	1406	1348	1455
Potri.001	0.557111	6.938344	3.27E-06	0.000388	1	1224	1321	1316
Potri.010	0.708616	4.89776	3.12E-06	0.000371	1	362	264	259
Potri.011	0.603194	4.416322	3.03E-06	0.000363	1	239	211	209
Potri.011	0.870242	3.316949	2.94E-06	0.000354	1	83	108	80
Potri.002	0.531165	5.943155	2.86E-06	0.000346	1	743	621	603
Potri.001	0.755259	3.312036	2.86E-06	0.000346	1	100	93	92
Potri.004	0.647534	6.195357	2.68E-06	0.000327	1	750	852	620
Potri.003	0.473581	8.917812	2.65E-06	0.000326	1	5599	5090	5134

Potri.009	0.540768	6.421683	2.46E-06	0.000306	1	998	811	921
Potri.006	0.641397	5.397664	2.47E-06	0.000306	1	391	444	443
Potri.009	0.762583	3.477223	2.36E-06	0.000295	1	112	107	100
Potri.011	0.948361	3.224493	2.35E-06	0.000295	1	74	103	68
Potri.009	0.632914	5.404899	2.19E-06	0.000277	1	482	390	425
Potri.008	0.830599	3.05757	2.02E-06	0.000256	1	90	73	68
Potri.019	3.501099	-0.95512	3.31E-05	0.002555	1	0	0	2
Potri.014	1.346539	1.503015	3.37E-05	0.00258	1	14	21	24
Potri.013	0.661162	4.606342	1.83E-06	0.000238	1	238	255	239
Potri.014	2.51727	-0.54057	3.54E-05	0.002665	1	2	2	2
Potri.002	0.909062	2.836213	1.70E-06	0.000223	1	60	69	61
Potri.001	0.588708	7.345785	1.67E-06	0.000219	1	1680	1770	1611
Potri.010	0.655169	4.425667	1.62E-06	0.000213	1	243	181	226
Potri.016	0.737958	3.77441	1.62E-06	0.000213	1	136	126	135
Potri.012	0.541208	6.794984	1.55E-06	0.000206	1	1221	1175	1132
Potri.006	0.759921	4.926295	1.55E-06	0.000206	1	259	342	273
Potri.003	0.552013	6.367706	1.50E-06	0.000201	1	877	910	821
Potri.019	0.817301	3.441403	1.48E-06	0.0002	1	124	80	101
Potri.015	0.90904	2.757504	1.32E-06	0.000182	1	62	64	54
Potri.006	0.939677	3.274996	1.31E-06	0.000181	1	77	103	75
Potri.006	1.378534	1.152349	4.79E-05	0.003442	1	14	11	20
Potri.010	0.710086	4.8712	1.22E-06	0.000172	1	258	318	284
Potri.007	0.717803	7.392472	1.22E-06	0.000172	1	1856	1220	1904
Potri.014	0.825607	3.090588	1.20E-06	0.000171	1	73	79	84
Potri.013	1.743446	1.697948	4.91E-05	0.003494	1	10	19	26
Potri.002	0.517821	8.454837	1.10E-06	0.000159	1	4029	3443	3810
Potri.007	1.429796	0.690058	5.23E-05	0.003675	1	13	9	9
Potri.001	1.005888	2.519795	5.26E-05	0.003688	1	45	62	38
Potri.008	1.321274	1.819899	5.29E-05	0.003691	1	32	14	30
Potri.009	0.597398	7.102626	9.61E-07	0.000142	1	1516	1524	1228
Potri.016	0.601879	6.558235	9.44E-07	0.00014	1	923	1016	972
Potri.004	0.504944	8.736081	8.86E-07	0.000132	1	4843	4387	4542
Potri.010	0.515896	8.794318	8.82E-07	0.000132	1	5414	4572	4324
Potri.006	0.852554	3.638804	8.60E-07	0.000129	1	113	118	112
Potri.004	0.689231	6.698208	8.14E-07	0.000123	1	897	1057	1131
Potri.010	0.864234	5.419343	7.74E-07	0.000118	1	401	332	450
Potri.006	0.644365	6.768116	7.56E-07	0.000116	1	1053	1244	1009
Potri.015	0.643881	7.145608	7.50E-07	0.000115	1	1384	1607	1307
Potri.004	0.921895	2.582208	7.43E-07	0.000115	1	53	55	50
Potri.011	2.529404	-0.53817	6.25E-05	0.00425	1	2	2	2
Potri.001	0.691354	4.032509	6.81E-07	0.000107	1	165	160	160
Potri.010	0.567286	7.538353	6.01E-07	9.52E-05	1	1881	2040	1910
Potri.005	0.606765	5.42366	5.81E-07	9.24E-05	1	476	403	448
Potri.005	0.741174	3.641734	5.66E-07	9.04E-05	1	137	115	110
Potri.012	0.797817	3.772911	5.64E-07	9.04E-05	1	140	112	135
Potri.012	0.632683	6.334907	5.62E-07	9.03E-05	1	786	884	791
Potri.002	0.717939	3.963313	5.60E-07	9.03E-05	1	171	137	150
Potri.001	0.597357	5.799112	5.57E-07	9.02E-05	1	594	589	543
Potri.005	0.609214	10.39563	5.20E-07	8.49E-05	1	15449	11616	14731
Potri.010	0.771331	3.946148	4.57E-07	7.58E-05	1	162	135	145
Potri.009	0.906187	4.463189	4.39E-07	7.32E-05	1	182	211	201
Potri.014	0.550702	7.765199	4.25E-07	7.10E-05	1	2553	2124	2230
Potri.004	0.689627	5.400433	4.21E-07	7.06E-05	1	422	461	374
Potri.016	1.507077	0.360871	7.65E-05	0.004935	1	7	9	7

Potri.013	1.820076	-0.13234	8.21E-05	0.00521	1	5	4	4
Potri.003	1.420785	0.554033	8.35E-05	0.005268	1	10	7	11
Potri.001	0.735158	5.876774	3.99E-07	6.86E-05	1	514	675	521
Potri.011	1.018515	2.770018	8.39E-05	0.005274	1	65	40	68
Potri.002	0.599504	5.379166	3.80E-07	6.59E-05	1	424	424	439
Potri.001	0.820627	4.471962	3.76E-07	6.55E-05	1	270	165	193
Potri.004	0.982763	3.650102	3.75E-07	6.54E-05	1	119	103	105
Potri.018	0.846578	5.153065	3.61E-07	6.36E-05	1	299	408	278
Potri.013	1.055542	1.413418	8.54E-05	0.005331	1	23	23	18
Potri.014	0.555657	8.2608	3.41E-07	6.07E-05	1	3481	2881	3351
Potri.002	0.745864	7.455433	3.22E-07	5.76E-05	1	1485	1945	1656
Potri.005	0.95249	2.781292	2.76E-07	4.99E-05	1	69	47	64
Potri.007	2.563311	-0.51199	8.78E-05	0.005435	1	2	2	2
Potri.001	0.643183	5.744253	2.58E-07	4.73E-05	1	633	536	467
Potri.008	0.585206	7.249599	2.46E-07	4.56E-05	1	1680	1632	1439
Potri.004	0.587352	9.066446	2.38E-07	4.43E-05	1	5890	5176	5678
Potri.007	0.547159	7.837176	2.36E-07	4.41E-05	1	2701	2127	2447
Potri.017	1.207868	0.911815	0.000103	0.006159	1	16	14	11
Potri.016	0.711798	5.193853	2.18E-07	4.12E-05	1	324	381	371
Potri.013	1.367312	0.606101	0.000104	0.006159	1	13	11	6
Potri.012	1.274614	1.020006	0.000108	0.006326	1	15	19	9
Potri.007	0.924785	3.357035	1.93E-07	3.72E-05	1	94	81	98
Potri.005	0.70106	10.04928	1.90E-07	3.69E-05	1	12163	8385	11124
Potri.016	3.265383	-0.74634	0.000109	0.006389	1	0	3	0
Potri.001	0.755798	6.44516	1.65E-07	3.27E-05	1	1084	629	837
Potri.013	0.61874	5.124112	1.60E-07	3.20E-05	1	401	337	335
Potri.001	0.886539	4.177162	1.57E-07	3.14E-05	1	157	167	168
Potri.003	0.648803	7.585939	1.39E-07	2.86E-05	1	1824	2157	1836
Potri.001	1.525735	0.918472	0.000125	0.007107	1	12	7	16
Potri.010	5.682523	-1.33278	0.000129	0.007239	1	0	0	0
Potri.016	0.999797	3.444303	1.12E-07	2.34E-05	1	90	93	97
Potri.016	0.550653	7.198006	1.04E-07	2.20E-05	1	1666	1504	1484
Potri.008	0.80407	4.843758	1.03E-07	2.18E-05	1	247	317	246
Potri.001	1.341658	1.801856	0.000131	0.007363	1	31	22	21
Potri.017	0.689259	4.469137	9.57E-08	2.04E-05	1	247	204	209
Potri.005	0.737561	4.289473	9.20E-08	1.97E-05	1	194	182	193
Potri.003	0.813329	6.112858	8.90E-08	1.92E-05	1	783	542	643
Potri.003	5.488767	-1.43455	0.000135	0.007472	1	0	0	0
Potri.001	0.985569	3.380787	7.27E-08	1.62E-05	1	96	82	92
Potri.008	0.796616	6.741656	6.88E-08	1.55E-05	1	1010	1120	914
Potri.014	1.850453	-0.1109	0.000145	0.007973	1	4	5	4
Potri.019	1.272334	1.055919	0.000147	0.008062	1	10	18	16
Potri.012	0.949661	4.711794	5.16E-08	1.20E-05	1	244	222	230
Potri.008	0.776973	10.20572	4.96E-08	1.16E-05	1	13053	11655	9380
Potri.019	2.561512	-0.19358	0.00017	0.008941	1	2	5	1
Potri.006	1.904007	-0.38259	0.000178	0.00931	1	5	3	2
Potri.008	1.249481	1.154535	0.00018	0.009396	1	14	22	12
Potri.013	0.892495	6.591797	3.34E-08	8.44E-06	1	721	824	1074
Potri.008	0.710965	5.00379	3.15E-08	8.00E-06	1	307	330	308
Potri.017	1.025984	1.838813	0.000217	0.010961	1	19	37	32
Potri.013	1.606807	0.119639	0.000226	0.011225	1	5	7	6
Potri.004	1.376181	0.530178	0.00023	0.011387	1	5	12	11
Potri.005	0.901551	5.212703	2.27E-08	6.16E-06	1	376	373	259
Potri.009	0.828579	4.76927	2.20E-08	6.05E-06	1	243	283	236

Potri.001	0.731313	4.44416	2.06E-08	5.72E-06	1	222	196	218
Potri.006	1.007919	1.670261	0.000233	0.011539	1	27	22	30
Potri.001	1.155891	1.588301	0.000241	0.011827	1	35	14	21
Potri.011	1.057643	1.163375	0.000252	0.012264	1	15	22	16
Potri.006	0.821184	4.098018	1.23E-08	3.63E-06	1	177	144	160
Potri.008	0.856411	4.515398	9.19E-09	2.77E-06	1	197	206	228
Potri.011	0.950466	4.08766	9.21E-09	2.77E-06	1	175	145	131
Potri.006	0.680814	7.571514	8.79E-09	2.70E-06	1	1955	1659	2093
Potri.014	0.666096	6.298924	7.14E-09	2.22E-06	1	845	757	774
Potri.006	0.706336	5.70307	6.18E-09	1.99E-06	1	562	453	531
Potri.001	0.861806	4.542708	6.10E-09	1.98E-06	1	199	231	211
Potri.001	0.995222	5.430854	5.81E-09	1.91E-06	1	393	356	374
Potri.005	0.585568	8.338319	5.71E-09	1.89E-06	1	3585	3192	3338
Potri.004	0.64259	6.454205	5.40E-09	1.80E-06	1	917	909	843
Potri.019	1.606988	0.421502	0.000321	0.014773	1	8	10	5
Potri.006	0.794398	4.674602	4.21E-09	1.45E-06	1	253	257	216
Potri.010	0.940053	3.493362	3.99E-09	1.39E-06	1	118	97	84
Potri.005	0.794099	5.16942	3.57E-09	1.27E-06	1	394	325	309
Potri.002	0.766393	6.42309	3.40E-09	1.22E-06	1	824	780	872
Potri.008	0.685812	5.908139	3.35E-09	1.21E-06	1	642	600	554
Potri.001	0.816923	6.304792	3.27E-09	1.19E-06	1	721	841	664
Potri.003	0.760154	9.0103	2.54E-09	9.65E-07	1	4383	5110	5379
Potri.009	0.731245	6.099768	2.23E-09	8.55E-07	1	770	580	668
Potri.009	0.722035	5.910298	1.74E-09	6.81E-07	1	665	567	542
Potri.008	1.694969	0.028657	0.000389	0.017094	1	6	4	6
Potri.010	0.757716	5.785026	1.35E-09	5.43E-07	1	627	480	497
Potri.019	1.205535	2.281221	0.00041	0.017805	1	36	46	30
Potri.002	0.625938	8.202611	7.72E-10	3.16E-07	1	3224	2855	2975
Potri.007	0.950114	4.197883	7.47E-10	3.11E-07	1	173	174	139
Potri.004	0.804029	5.124847	5.24E-10	2.25E-07	1	364	318	309
Potri.005	0.739379	5.528423	4.85E-10	2.10E-07	1	454	450	442
Potri.006	1.823733	-0.43346	0.000472	0.019883	1	5	1	4
Potri.010	0.838172	4.608944	3.06E-10	1.41E-07	1	236	198	247
Potri.002	0.768995	6.275182	1.91E-10	9.31E-08	1	756	748	728
Potri.008	1.069037	1.244425	0.000488	0.020283	1	18	20	18
Potri.T16	0.689785	8.712988	9.39E-11	4.80E-08	1	4136	4211	4171
Potri.004	0.830755	5.922182	8.48E-11	4.46E-08	1	538	576	583
Potri.018	1.013358	1.634227	0.000526	0.021366	1	29	15	33
Potri.001	5.204082	-1.59757	0.00055	0.022035	1	0	0	0
Potri.003	1.072245	0.980459	0.000577	0.022949	1	15	10	21
Potri.008	0.857258	5.846469	5.15E-12	3.25E-09	1	491	552	547
Potri.001	3.7253	-1.33555	0.000683	0.026328	1	0	0	1
Potri.008	0.824999	7.258946	4.58E-12	2.98E-09	1	1489	1318	1508
Potri.002	1.736032	-0.19655	0.000798	0.029786	1	9	0	4
Potri.003	1.433217	0.933893	0.000812	0.030254	1	5	8	24
Potri.011	1.018253	1.417133	0.000851	0.031361	1	14	27	24
Potri.010	0.74014	9.102887	1.51E-12	1.18E-09	1	5500	5392	5177
Potri.001	0.896228	5.205854	1.31E-12	1.04E-09	1	326	332	345
Potri.017	0.804246	7.618499	8.10E-13	6.69E-10	1	2000	1630	1966
Potri.015	1.099684	0.81667	0.000991	0.035047	1	11	18	11
Potri.001	1.152303	0.783716	0.001081	0.037201	1	10	19	9
Potri.007	1.14463	0.630272	0.001096	0.037523	1	11	9	14
Potri.018	0.98888	6.169799	2.14E-14	2.30E-11	1	650	581	651
Potri.012	1.052703	1.470458	0.001125	0.038141	1	25	18	24

Potri.004	0.843453	7.707678	1.28E-14	1.57E-11	1	1968	1960	1906
Potri.010	1.020813	1.209087	0.0012	0.039925	1	24	12	20
Potri.010	1.480555	0.043815	0.001229	0.040439	1	6	6	6
Potri.013	1.668608	0.610926	0.001254	0.040982	1	10	10	6
Potri.017	5.205367	-1.59753	0.001255	0.040982	1	0	0	0
Potri.017	2.56553	-0.68844	0.001264	0.041153	1	2	1	2
Potri.005	0.934934	5.432813	3.70E-16	5.88E-13	1	425	363	370
Potri.006	1.51074	-0.24003	0.001269	0.041212	1	5	4	5
Potri.001	0.948165	7.088853	6.55E-17	1.17E-13	1	1323	1205	1104
Potri.003	2.555404	-0.92061	0.001322	0.042667	1	2	2	0
Potri.017	0.914815	9.743442	2.12E-17	4.55E-14	1	7821	7382	7982
Potri.018	3.572855	-1.43313	0.001357	0.043438	1	0	0	1
Potri.019	1.247836	0.297813	0.001383	0.044167	1	13	7	5
Potri.002	3.557894	-1.43449	0.0014	0.044431	1	0	0	1
Potri.011	1.556609	-0.13028	0.001435	0.045124	1	4	7	4
Potri.018	1.519665	-0.15404	0.001445	0.045275	1	6	1	8
Potri.013	1.390217	0.116796	0.001456	0.045431	1	5	7	8
Potri.003	1.292308	0.170408	0.00148	0.046018	1	6	7	9
Potri.T13	4.970792	-1.71794	0.001505	0.046558	1	0	0	0
Potri.003	1.179006	0.405268	0.001531	0.047152	1	6	11	11

PagLBD210	PagLBD210	PagLBD210	Pfam	Panther	KOG	ec	KO	GO
26	21	13	PF03181	PTHR31236,	PTHR31236:	SF2		
91	105	67	PF13499	PTHR10891	KOG0027		K13448	
433	393	378	PF11820	PTHR33128				
49	67	41	PF03094	PTHR31942,	PTHR31942:	SF20	K08472	GO:001602
3478	3331	3576		PTHR21091,	PTHR21091.	5. 1. 20		
160	224	181	PF02338	PTHR12419,	PTHR12413.	4. 19. 12		
49	56	54	PF14215	PTHR13902,	PTHR13902:	SF3		
42	29	22	PF05678	PTHR33179,	PTHR33179:	SF7		
48	48	47	PF14416,	PPTHR32285,	PTHR32285:	SF48		
19	29	12	PF02458	PTHR31623,	PTHR31622.	3. 1. 160		GO:001674
683	671	591	PF14416,	PPTHR32285,	PTHR32285:	SF7		
791	914	989	PF00168	PTHR31208,	PTHR31208:	SF3		GO:000551
185	198	205	PF07731,	PPTHR11709,	PTHR11701.	10. 3. 2	K05909	GO:005511
60	54	67		PTHR24115,	PTHR24115:	SF449		GO:000701
1078	1283	1172		PTHR35301,	PTHR35301:	SF1		
64	42	39	PF05199,	PPTHR10668,	PTHR10661.	1. 1. 3. 20	K17756	GO:005511
6	12	5	PF02458	PTHR31623,	PTHR31622.	3. 1. 160		GO:001674
165	146	204	PF08449	PTHR10778	KOG1582		K15277	GO:005508
42	53	46	PF00560	PTHR27004	KOG0472	2. 7. 11. 1		GO:000551
163	165	184	PF07690,	PPTHR23500	KOG0254		K08150	GO:005508
2260	2507	2647	PF14569,	PPTHR13301,	PTHR13302.	4. 1. 12		GO:003024
1018	1108	876	PF00249	PTHR10641,	PTHR10641:	SF484	K09422	
21	22	14	PF00067	PTHR24286	KOG0157			GO:005511
181	189	103	PF00314	PTHR31048,	PTHR31048:	SF32		
341	336	349	PF00249	PTHR12802	KOG0724			
33	17	23	PF14226,	PPTHR10209	KOG0143	1. 14. 11. 20		GO:005511
141	135	114	PF00571	PTHR11911				
348	243	135	PF13561	PTHR24322	KOG0725			
1741	1617	1935		PTHR34113,	PTHR34113:	SF3		
88	82	91		PTHR39113,	PTHR39113:	SF1		
24	13	19	PF02365	PTHR31744,	PTHR31744:	SF6		GO:000635
717	784	712		PTHR31348,	PTHR31348:	SF2		
184	185	257	PF05678	PTHR33179,	PTHR33179:	SF4		
53	37	23	PF00657	PTHR22835,	PTHR22833.	1. 1. 3		GO:001678
164	125	169		PTHR10774,	PTHR10774:	SF95		
74	87	88	PF11820	PTHR33128,	PTHR33128:	SF10		
74	74	84		PTHR34947,	PTHR34947:	SF2		
103	123	165	PF06398,	PPTHR10024,	PTHR10024:	SF243		GO:000551
58	34	41	PF00447	PTHR10015	KOG0627		K09419	GO:004356
24	27	18	PF00892	PTHR31218,	PTHR31218:	SF33		GO:001602
459	490	369	PF03766,	PPTHR31775				
217	254	255		PTHR33709,	PTHR33709:	SF3		
35	34	15	PF00234	PTHR33076,	PTHR33076:	SF4		
96	64	61		PTHR10460,	PTHR10460:	SF10		
63	79	64	PF02458	PTHR31623,	PTHR31622.	3. 1. 160		GO:001674
86	111	115	PF03134,	PPTHR12300,	PTHR12300:	SF43		
30	39	35	PF08276,	PPTHR27002	KOG1187	2. 7. 11. 1		GO:004854
286	318	262	PF13419	PTHR12725	KOG3109	3. 1. 3. 74	K07025	
198	192	203	PF00808	PTHR10252,	PTHR10252:	SF48	K08066	
553	616	565	PF00046	PTHR24326	KOG0484			GO:000367
98	145	94	PF00847	PTHR31677,	PTHR31677:	SF17	K09286	GO:000635

953	977	907 PF04110	PTHR10969KOG1654	K08341	GO:000573
34	31	32 PF00481	PTHR13832KOG0698	3. 1. 3. 16 K14803	GO:000382
176	170	212 PF02458	PTHR31642, PTHR31642:SF5		GO:001674
556	580	545 PF12697	PTHR10992, PTHR10993. 1. 1. 1		
192	220	163 PF02893	PTHR31969, PTHR31969:SF1		
18	25	22 PF01477, PPTHR11771, PTHR11771. 13. 11. 1	K00454		GO:000551
56	56	45 PF00388	PTHR13593KOG4306	3. 1. 4. 11, 4. 6. 1. 13	
123	144	150 PF06955, PPTHR31062, PTHR31062. 4. 1. 207			GO:004804
103	84	125 PF00412	PTHR24206KOG1700	K09377	GO:000827
186	217	214 PF05623	PTHR32010, PTHR32010:SF8		
863	793	688 PF00141	PTHR31235, PTHR31231. 11. 1. 7	K00430	GO:005511
102	141	113 PF05142	PTHR31604, PTHR31604:SF2		
71	53	36 PF02458	PTHR31642, PTHR31642. 3. 1. 84		GO:001674
760	663	579 PF08477	PTHR24072KOG0393	K04392	GO:000726
322	379	424 PF13306, PPTHR24006KOG4341			GO:000551
501	494	384	PTHR36040, PTHR36040:SF2		
80	114	82 PF06232	PTHR31718, PTHR31718:SF9		
1588	1672	1638 PF00241	PTHR11913KOG1735	K05765	GO:000562
88	98	62 PF00170, PPTHR22952, PTHR22952:SF179	K14431		GO:004356
39	42	8 PF00232	PTHR10353, PTHR10353. 2. 1. 21		GO:000597
630	657	585 PF13632	PTHR32044	2. 4. 1. 32 K13680	
637	636	697	PTHR34280, PTHR34280:SF2		
250	279	314 PF13414	PTHR23083, PTHR23083:SF444		
5	5	2 PF03055	PTHR10543, PTHR10541. 13. 11. 51		
2	5	1 PF03181	PTHR31236, PTHR31236:SF2		
286	346	279 PF00462	PTHR10168KOG1752	1. 8. 1. 9, 1K03676	GO:004545
526	491	536 PF00249	PTHR24078KOG0724		
4	3	5 PF00067	PTHR24298KOG0156	1. 14. 13. 8K13083	GO:005511
156	159	182 PF01490	PTHR22950KOG1303		
48	53	36 PF03492	PTHR31009, PTHR31002. 1. 1. 278	K18848	GO:000816
100	83	77 PF01190	PTHR33210		
83	91	82	PTHR33736, PTHR33736:SF1		
87	71	96	PTHR36375, PTHR36375:SF1		
1047	1215	1337 PF02225, PPTHR10795, PTHR10793. 4. 14. 10			GO:000650
49	54	37 PF01657, PPTHR27002KOG1187	2. 7. 11. 1		GO:000646
1313	1282	1391 PF00026	PTHR13683KOG1339	3. 4. 23. 12	GO:000650
1001	1329	1426 PF00083	PTHR11662KOG2533	3. 6. 3. 20 K13783	GO:005508
1945	2038	1867 PF01424, PPTHR15672KOG2953			GO:000367
265	229	295 PF14510, PPTHR19241, PTHR19243. 6. 3. 25			GO:001688
116	80	80 PF02701	PTHR31992, PTHR31992:SF12		GO:000635
1605	1928	2137 PF03765, PPTHR23324KOG1471			
408	436	371	PTHR10593, PTHR10593:SF27		
470	440	461	PTHR33738, PTHR33738:SF1		
114	122	102 PF00249	PTHR31003, PTHR31003:SF4		
122	83	56 PF01439	PTHR33543		GO:004687
25	17	16	PTHR35466, PTHR35466:SF2		
164	158	171 PF03188	PTHR23130, PTHR23130:SF88		GO:001602
38	61	44 PF00378	PTHR11941, PTHR11941:SF84		GO:000815
1619	1514	1528 PF08267, PPTHR30519, PTHR30512. 1. 1. 14	K00549		GO:000865
202	225	195 PF05678	PTHR33179, PTHR33179:SF9		
109	148	123 PF12937	PTHR24006		GO:000551
365	356	264 PF13410, PPTHR11260KOG0406	2. 5. 1. 18	K00799	GO:000551
67	75	52 PF01439	PTHR33543		GO:004687
164	146	131 PF03479	PTHR31100, PTHR31100:SF16		

465	411	452 PF04788	PTHR31300, PTHR31300:SF8		
39	48	32 PF00249	PTHR10641KOG0048	K09422	
72	90	58 PF00847	PTHR31677, PTHR31677:SF25		GO:000635
36	26	36	PTHR15852, PTHR15852:SF15		
43	48	51 PF03141	PTHR10108, PTHR10108:SF817		GO:000816
23	52	35 PF13921	PTHR10641KOG0048	K09422	
880	917	956 PF00097, PPTHR11685KOG1812			GO:004687
499	501	611 PF13639	PTHR22937KOG0320		GO:000827
250	260	257 PF00892	PTHR31218, PTHR31218:SF64		GO:001602
22	23	18 PF04577	PTHR20961KOG4698 2.4.1.255K18207		GO:001675
747	790	849 PF10358	PTHR31182, PTHR31182:SF3		
170	182	153 PF02458	PTHR31147, PTHR31142.3.1.162		GO:001674
638	649	731 PF01501	PTHR11183KOG1950 2.4.1.17		GO:001675
2041	2257	2814 PF00612, PPTHR32295, PTHR32295:SF18			GO:000551
142	129	100	PTHR37078, PTHR37078:SF1		
5	8	1 PF00232	PTHR10353, PTHR10353.2.1.21		GO:000597
54	65	50 PF12734	PTHR31568		
10	7	1 PF01501	PTHR11183KOG1950 2.4.1.123K18819		GO:001675
65	79	47 PF06955, PPTHR31062, PTHR31062.4.1.207K08235			GO:004804
208	218	257 PF02358	PTHR10788, PTHR10783.1.3.12 K01087		GO:000599
165	154	178 PF13639, PPTHR21319KOG1940 6.3.2.19 K10144			GO:000827
482	538	445 PF04832	PTHR11220		
146	143	153	PTHR31096, PTHR31092.7.7.59		
163	198	212 PF00149, PPTHR22953, PTHR22953.1.4.1			GO:001678
184	181	232	PTHR33133, PTHR33133:SF3		
66	78	100 PF00786	PTHR23177		
85	76	49 PF00657	PTHR22835, PTHR22833.1.1.3		GO:001678
437	460	535 PF00221	PTHR10362, PTHR10364.3.1.24 K10775		
334	337	311 PF13639	PTHR22763KOG0320		GO:000827
163	204	168 PF12678	PTHR22763, PTHR22763:SF34		GO:000827
5536	5908	6019 PF08267, PPTHR30519, PTHR30512.1.1.14 K00549			GO:000865
59	67	61 PF06127	PTHR34205, PTHR34205:SF2		
2138	2345	2636 PF08263, PPTHR27008KOG1187 2.7.11.1			GO:000646
184	229	185 PF10469	PTHR13360, PTHR13360:SF1		
63	58	45 PF04535	PTHR11615, PTHR11615:SF159		
296	348	343 PF00170	PTHR22952, PTHR22952:SF182		GO:004356
47	56	52 PF00847	PTHR31194, PTHR31194:SF4		GO:000635
522	539	680	PTHR34361, PTHR34361:SF2		
413	428	436 PF14299	PTHR32278, PTHR32278:SF3		
426	422	378 PF03352	PTHR31116, PTHR31113.2.2.20 K01246		GO:000872
7	7	5			
3	3	2 PF08031, PPTHR32448	1.3.3.8		GO:005511
136	179	165 PF13837	PTHR21654, PTHR21654:SF10		
38	42	43			
36	23	22 PF00005, PPTHR19241, PTHR19241:SF180			GO:001688
326	296	277 PF02183, PPTHR24326KOG0483	K09338		GO:004356
55	54	60 PF03106	PTHR31429, PTHR31429:SF16		GO:004356
226	279	172 PF02458	PTHR31642, PTHR31642.3.1.188K15400		GO:001674
51	38	31 PF01370	PTHR32487, PTHR32481.3.99.6, 1.3.1.3		GO:005066
47	27	40 PF04640	PTHR31065, PTHR31065:SF12		
22	32	30 PF07714	PTHR27001KOG1187 2.7.11.1, 2.7.10.2		GO:000646
325	375	334 PF13193, PPTHR24096, PTHR24096.2.1.34, K01904			GO:000815
194	251	286 PF00067	PTHR24282KOG0157		GO:005511
242	209	153 PF02365	PTHR31989, PTHR31989:SF23		GO:000635

143	185	194 PF13499	PTHR23056KOG0034		
181	176	161 PF13962	PTHR24177, PTHR24177:SF11		
244	329	385 PF00010	PTHR12565KOG3116, KOG4304		GO:004698
170	173	100 PF00067	PTHR24296KOG0157	1. 14. 15. 3K15402	GO:005511
375	350	430 PF13923	PTHR12313KOG0823	6. 3. 2. 19 K10666	
37	29	32 PF14226,	PPTHR10209KOG0143	K05282	GO:005511
50	40	59 PF00005,	PPTHR19241, PTHR19241:SF258		GO:001688
688	587	574 PF03791,	PPTHR11850KOG0773		GO:000563
21	28	38 PF02171	PTHR22891, PTHR22891:SF4		GO:000367
59	58	77 PF07731,	PPTHR11709, PTHR11701. 10. 3. 2	K05909	GO:005511
104	112	68 PF00067	PTHR24296KOG0157	1. 14. 15. 3K15402	GO:005511
97	105	100 PF01823	PTHR33199, PTHR33199:SF8		
109	144	130			
78	68	92 PF00221	PTHR10362, PTHR10364. 3. 1. 24	K10775	
148	163	191 PF03479	PTHR31500, PTHR31500:SF22		
1229	1246	1157 PF00076	PTHR24012KOG0148	K13201	GO:000367
103	117	106	PTHR36740		
78	74	77 PF00484	PTHR11002KOG1578	4. 2. 1. 1	GO:000827
168	179	202 PF00249	PTHR12802KOG0724		
208	202	183 PF04852	PTHR31165, PTHR31165:SF9		
518	598	619 PF07732,	PPTHR11709, PTHR11701. 10. 3. 2	K05909	GO:000550
1374	1416	1562 PF05920,	PPTHR11850KOG0773		GO:000635
0	0	0 PF13193,	PPTHR24095, PTHR24095:SF189		GO:000815
211	210	204 PF04640	PTHR31065, PTHR31065:SF8		
104	101	70 PF07649	PTHR13871, PTHR13872. 7. 1. 107		GO:005511
56	54	55	PTHR26312, PTHR26312:SF75		
54	49	45 PF07714	PTHR24347, PTHR24342. 7. 11. 1		GO:000646
320	339	216 PF13202	PTHR10891, PTHR10891:SF575		GO:000550
2	1	2 PF01734	PTHR32176KOG0513		GO:000662
873	924	874 PF03283	PTHR21562, PTHR21562:SF13		GO:001678
1087	1126	1039 PF10539	PTHR10857, PTHR10857:SF54		
251	271	321 PF08079,	PPTHR11524KOG3184	K02937	
329	330	268 PF13716	PTHR11106KOG2633		
74	88	61			
816	941	857 PF00685	PTHR11783KOG1584	2. 8. 2. 27	GO:000814
136	124	107 PF13499	PTHR10891KOG0027		
50	33	42	PTHR33672, PTHR33672. 3. 3. 16		
210	181	184	PTHR33124, PTHR33124:SF12		
41	46	26	PTHR33088		
87	116	102 PF03552	PTHR13301, PTHR13302. 4. 1. 12		GO:003024
45	47	40 PF12776	PTHR31704, PTHR31704:SF4		
447	436	304 PF14368	PTHR33044, PTHR33044:SF36		
63	81	77 PF04110	PTHR10969KOG1654	K08341	GO:000573
87	107	83 PF00571	PTHR13780, PTHR13780:SF39		
87	114	73 PF13912	PTHR26374, PTHR26374:SF208		
114	125	156 PF12638	PTHR31750, PTHR31750:SF4		
29	34	24 PF14368	PTHR33044, PTHR33044:SF36		
20	22	18 PF03398	PTHR12161KOG2027		
156	189	182 PF06943	PTHR31747, PTHR31747:SF1		
152	119	122 PF00249	PTHR10641KOG0048	K09422	
423	459	477 PF01490	PTHR22950KOG1303		
162	177	162 PF04674	PTHR31279, PTHR31279:SF4		
85	83	69 PF01490	PTHR22950KOG1303		
33	63	36 PF00314	PTHR31048, PTHR31048:SF10		

158	133	138	PTHR33738, PTHR33738:SF2		
84	80	73	PTHR33098, PTHR33098:SF8		
165	147	232 PF05678	PTHR33179, PTHR33179:SF5		
81	79	111 PF13639	PTHR14155, PTHR14155:SF145		GO:000827
576	538	521	PTHR31789, PTHR31789:SF5		
28	35	45 PF00076	PTHR24012KOG0149		GO:000367
33	38	14 PF02365	PTHR31744, PTHR31744:SF3		GO:000635
75	91	50 PF03766, P	PTHR31775		
115	101	96			
127	148	106 PF01643	PTHR31727, PTHR31723. 1. 2. 14	K10781	GO:001679
172	192	151 PF00141	PTHR31388, PTHR31381. 11. 1. 7	K00430	GO:005511
713	699	587	PTHR33181, PTHR33181:SF4		
20	33	27 PF04678	PTHR13462KOG2966		
942	936	919 PF07883	PTHR31238, PTHR31238:SF18		
228	243	229 PF01842	PTHR31096, PTHR31092. 7. 7. 59		GO:001659
60	65	70 PF13639	PTHR14155, PTHR14155:SF178		GO:000827
287	267	326 PF14531, P	PTHR24347KOG0583 2. 7. 11. 1		GO:000716
28	42	36 PF02365	PTHR31744, PTHR31744:SF4		GO:000635
218	220	212 PF03372	PTHR14859, PTHR14859:SF2		
307	238	292 PF03999	PTHR19321KOG4302	K16732	GO:000801
49	54	65 PF13499, P	PTHR10891KOG0027	K13448	
65	87	65 PF02365	PTHR31989, PTHR31989:SF45		GO:000635
73	97	84 PF04110	PTHR10969KOG1654	K08341	GO:000573
1642	1762	1958 PF02469	PTHR32077, PTHR32077:SF7		
31	35	24 PF03106	PTHR31221, PTHR31221:SF37		GO:004356
83	71	60 PF01425	PTHR11895KOG1211 3. 5. 1. 99		GO:001688
88	81	82 PF08263, P	PTHR27008KOG1187 2. 7. 11. 1		GO:000551
93	61	50 PF03106	PTHR31221, PTHR31221:SF19		GO:004356
27	46	47 PF10250	PTHR31818, PTHR31818:SF0		
9	8	6 PF03321	PTHR31901, PTHR31901:SF12	K14487	
175	214	178 PF08596	PTHR10241KOG1983		
624	726	795 PF07731, P	PTHR11709, PTHR11701. 10. 3. 2	K05909	GO:005511
361	379	359 PF02365	PTHR31079, PTHR31079:SF5		GO:000635
111	109	82	PTHR35282, PTHR35282:SF2		
124	140	143 PF00249	PTHR10641KOG0048	K09422	
58	48	67 PF00249	PTHR10641KOG0048	K09422	
263	191	159 PF03015, P	PTHR11011KOG1221 1. 2. 1. 50,	K13356	GO:008001
2045	2257	2645 PF01490	PTHR22950KOG1303	K13946	
68	54	48 PF00909	PTHR11730KOG0682	K03320	GO:001602
38	77	63 PF00067	PTHR24298KOG0156 1. 14. 13. 21		GO:005511
59	48	66 PF01740, P	PTHR11814, PTHR11814:SF60	K17471	GO:001602
210	154	140	PTHR33088		
93	88	79 PF00153	PTHR24089KOG0762	K15109	
78	108	84 PF14368	PTHR33214, PTHR33214:SF6		
240	267	267 PF03009	PTHR22958KOG2421 3. 1. 4. 46		GO:000808
211	204	215 PF03479	PTHR31100, PTHR31100:SF3		
48	45	42 PF13947, P	PTHR27009KOG1187 3. 1. 4. 46		GO:003024
74	50	76 PF01490	PTHR22950KOG1303		
2746	2746	3122 PF13632, P	PTHR13301, PTHR13302. 4. 1. 12	K10999	
1513	1497	1484	PTHR13902, PTHR13902. 7. 11. 1		
84	67	26 PF01439	PTHR33543		GO:004687
44	39	41	PTHR36063		
26	34	15 PF00892	PTHR31218, PTHR31218:SF12		GO:001602
1320	1409	1429 PF14416, P	PTHR32285, PTHR32285:SF10		GO:005082

25	31	12 PF07883	PTHR31238, PTHR31238:SF44		
15	24	32 PF01619	PTHR13914KOG0186	1. 5. 5. 2	K00318 GO:000656
6	9	11 PF12681	PTHR10374KOG2944		
94	114	100	PTHR10374, PTHR10374:SF11		
160	167	154 PF13837	PTHR21654, PTHR21654:SF10		
232	278	292 PF03141	PTHR10108, PTHR10108:SF812		GO:000816
2423	2648	2783 PF00201	PTHR11926, PTHR11926:SF343		GO:001675
64	34	44 PF01486, PPTHR11945KOG0014			GO:000635
121	104	106 PF05705	PTHR12265KOG2521		
17	20	30 PF13639	PTHR14155, PTHR14155:SF94		GO:000827
61	72	79 PF04043, PPTHR31707, PTHR31703. 1. 1. 11			GO:000485
654	725	849 PF03168	PTHR31234, PTHR31234:SF6		
161	112	105 PF01419	PTHR23244, PTHR23244:SF249		GO:008002
94	91	76	PTHR35290, PTHR35290:SF2		
534	506	499	PTHR34959, PTHR34959:SF1		
81	84	76 PF10033	PTHR13430KOG4573		K08331
355	344	388 PF12043	PTHR31390, PTHR31390:SF2		
94	71	43 PF00249	PTHR10641KOG0048		K09422
577	689	685 PF03096	PTHR11034KOG2931		
30	31	43 PF14531, PPTHR27002KOG1187	2. 7. 11. 1		K04733
145	164	165 PF00069, PPTHR27007KOG1187	2. 7. 11. 1		GO:000646
262	326	241 PF14259			
379	368	379 PF05911	PTHR31580, PTHR31580:SF5		
48	55	49	PTHR33124, PTHR33124:SF8		
1982	2199	1928 PF00067	PTHR24298, PTHR24298:SF73		K09755 GO:005511
573	564	622 PF02469	PTHR32077, PTHR32077:SF10		
28	52	23 PF00249	PTHR10641KOG0048		K09422
1277	1104	755 PF01048	PTHR21234, PTHR21233. 2. 2. 9		GO:000911
95	136	93 PF00704	PTHR11177	3. 2. 1. 14, K01183	GO:000597
304	326	335 PF14364, PPTHR33098, PTHR33098:SF1			
37	44	51 PF00690, PPTHR24093, PTHR24093. 6. 3. 8			K01537 GO:000551
83	99	94 PF07816	PTHR33095, PTHR33095:SF10		
669	797	821 PF08263, PPTHR27000KOG0472	2. 7. 11. 1		GO:000551
823	785	662 PF00854	PTHR11654, PTHR11654:SF146		GO:001602
67	64	67 PF15365	PTHR33670, PTHR33670:SF2		
422	470	398	PTHR34936, PTHR34936:SF1		
94	102	100 PF08264, PPTHR11946, PTHR11946. 1. 1. 4			K01869 GO:000641
3	4	5	PTHR36016		
534	567	522 PF04669	PTHR31444, PTHR31444:SF8		
2851	2609	1839 PF14368	PTHR33122, PTHR33122:SF6		
490	501	505 PF03168	PTHR31234, PTHR31234:SF6		
242	296	307	PTHR35274, PTHR35274:SF1		
45	64	51 PF13193, PPTHR24095, PTHR24095:SF189			GO:000815
20	25	22	PTHR36615, PTHR36615:SF1		
91	135	110 PF05577	PTHR11010, PTHR11013. 4. 16. 2		K01285 GO:000823
566	591	372 PF00067	PTHR24296KOG0157	1. 14. 14. 1K15401	GO:005511
62	84	86	PTHR16223, PTHR16223:SF21		
27	28	30 PF01740, PPTHR11814, PTHR11814:SF103			K17469 GO:001602
61	52	36 PF03106	PTHR31221, PTHR31221:SF7		GO:004356
611	556	510 PF04398	PTHR31676, PTHR31676:SF12		
274	203	276 PF04759	PTHR31696, PTHR31696:SF15		
283	255	260 PF07732, PPTHR11709, PTHR11701. 10. 3. 2			K05909 GO:000550
249	288	300 PF05000, PPTHR19376, PTHR19372. 7. 7. 6			K16250 GO:000635
37	33	25 PF01565, PPTHR13878, PTHR13871. 5. 99. 12			K00279 GO:005511

234	262	227 PF11820	PTHR33128, PTHR33128:SF13		
220	234	228 PF03676	PTHR13465KOG2819		
1685	1840	1668	PTHR33474, PTHR33474:SF2		
59	42	25 PF03015,	PPTHR11011KOG1221 1. 2. 1. 84	K13356	GO:008001
138	116	114 PF01823	PTHR33199, PTHR33199:SF4		
175	157	221 PF00067	PTHR24296KOG0157		GO:005511
78	108	88 PF00400	PTHR22844KOG0271, K2. 7. 11. 7		GO:000551
247	252	291 PF02386	PTHR31064		GO:005508
222	231	244 PF01733	PTHR10332KOG1479	K15014	GO:001602
0	1	0 PF00249	PTHR10641KOG0048	K09422	
106	112	77 PF01553	PTHR15486, PTHR15482. 3. 1. 15	K13508	GO:001674
77	57	69 PF13561	PTHR24322KOG0725 1. 3. 1. 9	K00208	
609	535	580 PF03999	PTHR19321KOG4302	K16732	GO:000801
925	1010	1100 PF01501	PTHR13778, PTHR13772. 4. 1. 43		GO:001675
476	522	374 PF02309	PTHR31734, PTHR31734:SF11	K14484	GO:000635
123	121	118 PF04043	PTHR31080, PTHR31083. 1. 1. 11		GO:000485
7	5	5 PF00249	PTHR31314, PTHR31314:SF10		
120	125	76	PTHR33348, PTHR33348:SF3		
713	693	673 PF02309	PTHR31734, PTHR31734:SF6	K14484	GO:000635
154	139	131 PF07714	PTHR27001KOG1187 2. 7. 11. 1		GO:000646
165	160	191 PF05920,	PPTHR11850KOG0773		GO:000635
820	891	1084 PF06955,	PPTHR31062, PTHR31062. 4. 1. 207	K08235	GO:004804
276	263	232 PF13347	PTHR19432, PTHR19432:SF38	K15378	
191	211	133 PF01553	PTHR15486, PTHR15482. 3. 1. 15,	K13508	GO:001674
879	805	585 PF01734	PTHR32176KOG0513 3. 1. 1. 26		GO:000662
37	46	47 PF00249	PTHR10641KOG0048	K09422	
87	80	54 PF07690	PTHR11654, PTHR11654:SF90	K14638	GO:005508
173	163	169 PF05920,	PPTHR11850KOG0773		GO:000635
88	67	25 PF08659	PTHR24322KOG0725 1. 1. 1. 206	K08081	
74	95	92 PF07911	PTHR33108, PTHR33108:SF2		
254	262	185 PF00249	PTHR10641KOG0048	K09422	
79	77	96 PF01925	PTHR14255, PTHR14255:SF6		GO:001602
155	185	178	PTHR27000, PTHR27000:SF167		
2531	2473	2599			
12	19	20	PTHR24078, PTHR24078:SF255		
4	3	3 PF01501	PTHR11183KOG1950 2. 4. 1. 123	K18819	GO:001675
69	71	77	PTHR14237 2. 8. 1. 9		
322	343	313 PF04525	PTHR31087, PTHR31087:SF11		
159	155	104 PF00171	PTHR11699, PTHR11691. 2. 1. 3	K00128	GO:005511
27	35	24	PTHR33181, PTHR33181:SF7		
81	71	82 PF00083	PTHR23500KOG0254	K08150	GO:005508
18	10	13 PF04640	PTHR31065, PTHR31065:SF12		
49	27	28 PF12708	PTHR31375, PTHR31373. 2. 1. 15	K01184	
272	281	279 PF12734	PTHR31568, PTHR31568:SF15		
10801	11404	11613 PF08100,	PPTHR11746KOG3178 2. 1. 1. 68	K13066	GO:004698
357	281	165 PF00067	PTHR24296KOG0157 1. 14. 14. 1	K15401	GO:005511
127	95	88 PF00314	PTHR31048, PTHR31048:SF5		
137	164	168 PF03106	PTHR31221, PTHR31221:SF12	K13424	GO:004356
226	223	212 PF03055	PTHR10543KOG1285 1. 13. 11. 7	K17913	
2348	2137	1347 PF14368	PTHR33122, PTHR33122:SF6		
306	328	342 PF02984,	PPTHR10177KOG0656	K14505	GO:000563
4	7	0 PF07883	PTHR31238, PTHR31238:SF44		
485	425	299 PF00141	PTHR31235, PTHR31231. 11. 1. 7	K00430	GO:005511
4	7	6 PF03195	PTHR31301, PTHR31301:SF22		

777	741	848 PF00394, PPTHR11709, PTHR11701. 10. 3. 2	K05909	GO:005511
2094	2227	2656 PF00221 PTHR10362, PTHR10364. 3. 1. 24	K10775	
78	62	57 PF13947, PPTHR27005KOG1187 2. 7. 11. 1		GO:003024
7	14	8 PF00403 PTHR22814KOG1603		GO:004687
3311	3030	2855 PF00067 PTHR24298KOG0156	K09755	GO:005511
52	65	54 PF02365 PTHR31744, PTHR31744:SF10		GO:000635
86	69	75 PF00786 PTHR23177, PTHR23177:SF23		
6484	7269	6978 PF00067 PTHR24298KOG0156 1. 14. 13. 1	K00487	GO:005511
61	66	57 PF07690 PTHR23515, PTHR23515:SF3	K02575	GO:005508
256	348	172		
112	123	76 PF03763 PTHR31775		
35	32	29 PF03169 PTHR31645, PTHR31645:SF1		GO:005508
11	19	15 PF00657 PTHR22835, PTHR22833. 1. 1. 3		GO:001678
915	1053	937 PTHR13833		
267	288	294 PF00069 PTHR27001KOG1187 2. 7. 11. 1		GO:000646
671	707	591 PF07687, PPTHR11014, PTHR11014:SF62	K14664	GO:001678
248	254	320 PF02365 PTHR31989, PTHR31989:SF39		GO:000635
15	10	13		
3	7	1 PF02458 PTHR31623, PTHR31622. 3. 1. 160		GO:001674
335	325	468 PF02309, PPTHR31384, PTHR31384:SF10	K14486	GO:000635
403	421	471 PF03822, PPTHR24343KOG0583 2. 7. 11. 1	K07198	GO:000716
391	579	618 PF10250 PTHR31741, PTHR31741:SF11		
41	53	36 PF05577 PTHR11010, PTHR11013. 4. 16. 2	K01285	GO:000823
359	320	329 PF00083 PTHR11662KOG2532 3. 6. 3. 27	K08193	GO:005508
41	33	43 PF09425, PPTHR33077, PTHR33077:SF6	K13464	
55	48	44 PF00135 PTHR23024KOG1515 3. 1. 1. 1	K14493	
21	31	27 PF07714 PTHR27003KOG1187 2. 7. 11. 1		GO:000646
10	13	15 PF01627 PTHR28242KOG4747	K14490	GO:000487
61	64	44 PF04535 PTHR11615, PTHR11615:SF120		
687	625	697 PF00010 PTHR16223, PTHR16223:SF38		GO:004698
403	419	370 PF00141 PTHR31235, PTHR31231. 11. 1. 7	K00430	GO:005511
134	170	134 PF04045 PTHR12058KOG2826	K05758	GO:003431
87	74	81 PF03195 PTHR31301, PTHR31301:SF2		
156	159	186 PF01740, PPTHR11814, PTHR11814:SF85	K17471	GO:001602
17	17	10 PF00173, PPTHR19370, PTHR19371. 7. 1. 1	K10534	GO:005511
775	847	720 PF06886 PTHR14326		GO:006023
21	26	14 PF13905 PTHR13871KOG2501 1. 8. 1. 8		
86	70	90 PF00892 PTHR31218, PTHR31218:SF10		GO:001602
429	510	411 PF07719, PPTHR11071, PTHR11075. 2. 1. 8	K05864	GO:000645
97	80	69 PF13716 PTHR11106KOG2633		
432	425	480 PF01419 PTHR23244, PTHR23244:SF249		GO:008002
171	198	106 PF12695 PTHR10992KOG1454 3. 1. 1. 23		
43	42	52 PF06200, PPTHR33077, PTHR33077:SF6	K13464	
16	16	9 PF00582 PTHR31964, PTHR31964:SF55		GO:000695
78	93	67 PF00010 PTHR12565, PTHR12565:SF128		GO:004698
5302	4723	3546 PF14368 PTHR33122, PTHR33122:SF6		
398	383	410 PF04669 PTHR31444, PTHR31442. 1. 1. 112	K18801	
833	928	788 PF04045 PTHR12058KOG2826	K05758	GO:003431
97	70	61 PF00403 PTHR22814KOG1603		GO:004687
0	0	0 PF00394, PPTHR11709, PTHR11701. 10. 3. 2	K05909	GO:005511
35	32	35 PF00010 PTHR13935, PTHR13935:SF53		GO:004698
292	279	328 PTHR32011, PTHR32011:SF2		
49	37	28 PF04535 PTHR11615, PTHR11615:SF113		
48	42	55 PF13637, PPTHR24177, PTHR24177:SF19		

139	171	100 PF12710, PPTHR15486, PTHR15482. 3. 1. 198K13508	GO:001674
24	25	12 PTHR33597, PTHR33597:SF2	
428	357	314 PF00141 PTHR31388, PTHR31381. 11. 1. 7 K00430	GO:005511
884	989	593 PF06404 PTHR33285, PTHR33285:SF3	GO:000828
8	5	1 PF00646 PTHR31482, PTHR31482:SF2	GO:000551
289	335	296 PTHR16223, PTHR16223:SF41	
112	144	91 PF00407 PTHR31338, PTHR31338:SF16	GO:000960
17	13	16 PTHR34948, PTHR34943. 6. 1. 3, 3. 6. 1. 25	
41	42	30 PF00249 PTHR10641KOG0048 K09422	
22	26	32 PF05804, PPTHR22849, PTHR22846. 3. 2. 19	GO:001656
18	15	17 PF07731, PPTHR11709, PTHR11701. 10. 3. 2 K05909	GO:005511
148	159	124 PF00854 PTHR11654, PTHR11654:SF73	GO:001602
9	14	16 PF04564 PTHR23315, PTHR23316. 3. 2. 19	GO:001656
113	136	168 PF12481 PTHR11772, PTHR11772:SF15	
3	1	0 PTHR23315, PTHR23316. 3. 2. 19	
543	529	603 PF13639 PTHR14155, PTHR14155:SF83	GO:000827
38	54	38 PF13912 PTHR26374, PTHR26374:SF208	
173	168	180 PF06749 PTHR31769, PTHR31769:SF9	
3637	3424	4259 PF13632, PPTHR13301, PTHR13302. 4. 1. 12 K10999	
279	314	270 PF13768 PTHR10338, PTHR10338:SF114	
25	17	18 PF14009 PTHR33052, PTHR33052:SF23	
60	63	41 PF02309 PTHR31734, PTHR31734:SF38 K14484	GO:000635
133	119	163 PF00271, PPTHR24075 3. 6. 4. 13 K12854	GO:001678
826	882	845 PF14416, PPTHR32285, PTHR32285:SF62	
52	77	67 PF03105 PTHR10783KOG1161	
161	150	143 PF04669 PTHR31444, PTHR31442. 1. 1. 112K18801	
84	77	83	
97	130	123 PF00232 PTHR10353, PTHR10353. 2. 1. 21 K05350	GO:000597
273	228	140 PF00141 PTHR31388, PTHR31381. 11. 1. 7 K00430	GO:005511
243	250	246 PF13639 PTHR14155KOG1493 K19041	GO:000827
25	33	26 PF00249 PTHR10641KOG0048 K09422	
4	3	1 PF01501 PTHR11183KOG1950 2. 4. 1. 17 K00750	GO:001675
96	100	86 PF04720 PTHR31579, PTHR31579:SF17	
86	95	77 PF03106 PTHR31221, PTHR31221:SF37	GO:004356
10	6	7 PF01490 PTHR22950KOG1303	
636	574	383 PF00657 PTHR22835, PTHR22833. 1. 1. 3	GO:001678
1546	1558	1527 PF02458 PTHR31642, PTHR31642. 3. 1. 133K13065	GO:001674
158	153	154 PF14531 PTHR24349KOG0032 2. 7. 11. 1, 4. 1. 1. 49	
1014	1041	953 PF00651 PTHR24413, PTHR24413:SF43 K10523	GO:000551
44	46	34 PF00847 PTHR31729, PTHR31729:SF2 K09286	GO:000635
16	14	10 PF04564, PPTHR27003KOG1187 2. 7. 11. 1	GO:001656
55	63	61 PTHR34670, PTHR34670:SF3	
92	87	68 PF03766, PPTHR31775	
66	90	66 PTHR24078, PTHR24078:SF279	
62	65	66 PF00249 PTHR10641, PTHR10641:SF665	
73	75	84 PF07690 PTHR11654, PTHR11654:SF121 K14638	GO:005508
28	27	17 PF14368 PTHR33044, PTHR33044:SF34	
574	603	601 PF02365 PTHR31989, PTHR31989:SF39	GO:000635
2	1	1 PF00847 PTHR31985, PTHR31985:SF28	GO:000635
343	413	359 PF01650 PTHR12000, PTHR12003. 4. 22. 34K01369	GO:000823
5	6	7 PF03016 PTHR11062KOG1021 2. 4. 2. 41 K18789	
329	383	322 PF03763 PTHR31471, PTHR31471:SF14	
36	30	33 PF05558 PTHR38522, PTHR38522:SF2	GO:005171
24	15	21 PF00447 PTHR10015KOG0627 K09419	GO:004356

81	59	73 PF14244, PPTHR24177, PTHR24177:SF19		
76	83	87 PF00854 PTHR11654, PTHR11654:SF177		GO:001602
121	110	89 PF02519 PTHR31374, PTHR31374:SF10	K14488	GO:000973
217	278	332 PF00612, PPTHR32295, PTHR32295:SF18		GO:000551
32	37	23 PF01764 PTHR21493, PTHR21493:SF124		GO:000662
27	29	20 PF13912 PTHR26374, PTHR26374:SF207		
368	209	196 PF01048 PTHR21234, PTHR21233. 2. 2. 9		GO:000911
69	61	68 PF00657 PTHR14209KOG3035 3. 1. 1. 2		GO:001678
101	122	108 PF13962 PTHR24177, PTHR24177:SF19		
882	840	751 PF00412 PTHR24206KOG1700	K09377	GO:000827
19	16	17		
361	355	419 PF00170 PTHR22952, PTHR22952:SF182		GO:004356
264	230	239 PF07876 PTHR33178, PTHR33178:SF2		
661	978	672 PF01486, PPTHR11945KOG0014		GO:000635
2	1	2 PF11883, PPTHR27002KOG1187 2. 7. 11. 1		GO:000467
618	531	366 PF00462 PTHR10168KOG1752 1. 8. 1. 9	K03676	GO:004545
49	49	39 PF00005, PPTHR19241, PTHR19243. 6. 3. 25		GO:001688
21	13	14 PF00249 PTHR10641KOG0048	K09422	
572	471	423 PF02458 PTHR31147, PTHR31142. 3. 1. 162		GO:001674
134	146	164 PF13855 PTHR32093		GO:000551
56	63	36 PF02801, PPTHR11712, PTHR11712. 3. 1. 179		
90	62	64 PF04398 PTHR31676, PTHR31676:SF20		
425	330	381 PF04535 PTHR11615, PTHR11615:SF143		
833	892	873 PF14416, PPTHR32285, PTHR32285:SF62		
59	77	71 PTHR33919, PTHR33919:SF2		
70	63	47 PF00005, PPTHR19241KOG0061		GO:001688
495	558	716 PTHR33739, PTHR33739:SF5		
70	111	106 PF08541, PPTHR31561, PTHR31562. 3. 1. 199K15397		GO:001674
1738	1822	2153 PF04669 PTHR31444, PTHR31444:SF8		
293	335	251 PF00999 PTHR32468, PTHR32468:SF10		GO:005508
656	632	750 PF14531 PTHR24362KOG0589 2. 7. 11. 1	K08857	
65	80	61 PTHR35301, PTHR35301:SF1		
0	0	1 PF00141 PTHR31388, PTHR31381. 11. 1. 7	K00430	GO:005511
63	60	55 PTHR10992, PTHR10992:SF740		
8	12	6 PF00249 PTHR31314		
7878	7374	7696 PF00067 PTHR24298KOG0156 1. 14. 13. 1K00487		GO:005511
96	112	98 PF12796, PPTHR24177, PTHR24177:SF11		
8	5	4 PF13499 PTHR10891KOG0027	K13448	
575	532	513 PF00249 PTHR10641, PTHR10641:SF484	K09422	
816	780	865 PF01501 PTHR11183KOG1950 2. 4. 1. 17		GO:001675
13	11	11		
31	26	34 PF00067 PTHR24286, PTHR24286:SF76	K01723	GO:005511
20	11	0 PF02365 PTHR31744, PTHR31744:SF6		GO:000635
13	14	16 PF13912 PTHR26374		
36	42	13 PF13668 PTHR31694, PTHR31694:SF6		
21	17	9 PF14226, PPTHR10209KOG0143 1. 14. 11. 9K05278		GO:005511
70	79	42 PF13561 PTHR24322KOG0725 1. 3. 1. 9	K00208	
17	17	13 PF00067 PTHR24298, PTHR24291. 14. 13. 89		GO:005511
340	362	380 PF03105 PTHR10783KOG1161		
0	0	1 PF03227 PTHR13234KOG3160	K08059	
1051	1089	1104 PF01501 PTHR32116, PTHR32112. 4. 1. 43	K13648	GO:001675
1244	1257	1036 PF00031 PTHR11413, PTHR11413:SF56		GO:000486
110	103	74 PF00230 PTHR19139KOG0223	K09872	GO:001602
7	7	2 PF00407 PTHR31907, PTHR31907:SF4		GO:000960

4	8	8 PF03195	PTHR31529, PTHR31529:SF2		
391	427	482 PF01490	PTHR22950KOG1303	K13946	
1047	1246	1217 PF00394, PPTHR11709, PTHR11701. 10. 3. 2		K05909	GO:005511
70	46	58 PF08100, PPTHR11746KOG3178	2. 1. 1. 128		GO:004698
207	227	177 PF13920	PTHR15315KOG1039		
17	12	9 PF03106	PTHR31221, PTHR31221:SF7		GO:004356
6	7	8 PF13639	PTHR14155, PTHR14155:SF179	K19038	GO:000827
69	86	63 PF01490	PTHR22950KOG1303	K15015	
135	140	135 PF00651, PPTHR32370, PTHR32370:SF30			GO:000551
83	80	120 PF01490	PTHR22950KOG1303		
20	11	16 PF00249	PTHR10641KOG0048	K09422	
3	3	11 PF03168	PTHR31852, PTHR31852:SF1		
22	11	18 PF13921	PTHR10641KOG0048	K09422	
595	663	606 PF04674	PTHR31279, PTHR31279:SF16		
10	19	17 PF07690	PTHR24064KOG0255		GO:005508
685	728	745 PF00564	PTHR31066, PTHR31066:SF4		GO:000551
5	4	8	PTHR33388, PTHR33388:SF4		
810	720	429 PF00657	PTHR22835, PTHR22833. 1. 1. 3		GO:001678
622	570	460	PTHR34670, PTHR34670:SF3		
69	73	61 PF00561	PTHR10992KOG1454	3. 7. 1. 9	
1335	1421	1581 PF03151	PTHR11132KOG1441	K15285	
2	0	1 PF00484	PTHR11002KOG1578	4. 2. 1. 1	K01673
1	4	1			GO:000827
7718	7589	7471 PF01490	PTHR22950KOG1303		
421	478	377			
14	20	25 PF00010	PTHR12565KOG4304	K12126	GO:004698
206	225	229 PF07714, PPTHR27007KOG1187	2. 7. 11. 1		GO:000646
603	587	405 PF02458	PTHR31642, PTHR31642. 3. 1. 188	K15400	GO:001674
27	16	23 PF04770	PTHR31948, PTHR31948:SF12		
7	6	5 PF03081	PTHR12542KOG2344	K07195	GO:000688
163	132	139	PTHR31439		
75	60	64 PF07716	PTHR23334, PTHR23334:SF25		GO:004356
0	3	4	PTHR34355, PTHR34353. 4. 19. 12		
1152	1301	1413 PF07839	PTHR33923, PTHR33922. 7. 11. 17		GO:000551
3	8	6 PF07690	PTHR24064, PTHR24064:SF274	K08176	GO:005508
772	921	785 PF07795	PTHR33431, PTHR33431:SF3		
7	8	9 PF00067	PTHR24298KOG0156		GO:005511
24	32	22 PF02365	PTHR31744, PTHR31744:SF3		GO:000635
1386	1426	1527 PF01650	PTHR12000, PTHR12003. 4. 22. 34	K01369	GO:000823
9	10	7 PF03634	PTHR31072, PTHR31072:SF18		
8	5	6 PF10533, PPTHR31282, PTHR31282:SF6			GO:004356
745	748	691 PF00046	PTHR24326KOG0484		GO:000367
7	14	14 PF06955, PPTHR31062, PTHR31062. 4. 1. 207		K08235	GO:004804
15	14	11 PF00155	PTHR11751, PTHR11754. 4. 1. 14	K01762	GO:003017
53	45	43 PF02365	PTHR31744, PTHR31744:SF7		GO:000635
2398	2583	2679 PF13347	PTHR19432, PTHR19432:SF38	K15378	
513	526	479 PF01490	PTHR22950KOG1303	K15015	
2	4	4 PF00201	PTHR11926, PTHR11922. 4. 1. 218	K08237	GO:001675
720	904	873 PF04674	PTHR31279, PTHR31279:SF3		
19	9	19 PF00122, PPTHR24092, PTHR24093. 6. 3. 1		K14802	GO:004687
1139	1392	1012	PTHR33306, PTHR33306:SF7		
45	59	27	PTHR34366, PTHR34366:SF2		
5	0	1 PF03016	PTHR11062KOG1021		
6	7	6 PF14389, PPTHR23054, PTHR23054:SF22			

5	6	5 PF00497, PPTHR18966KOG1052	K05387	GO:001602
20	17	23 PF14009 PTHR33148, PTHR33148:SF2		
5	2	0 PF03254 PTHR31889, PTHR31882. 4. 1. 69	K13681	GO:004254
773	852	895 PF00394, PPTHR11709, PTHR11701. 10. 3. 2	K05909	GO:005511
184	214	175 PF07058 PTHR31246, PTHR31246:SF5		GO:000801
59	50	58 PTHR13780, PTHR13780:SF39		
0	0	0 PTHR23155, PTHR23155:SF497		
126	119	100 PF01061, PPTHR19241, PTHR19241:SF180		GO:001602
3885	4772	4520 PF00759 PTHR22298, PTHR22293. 2. 1. 4		GO:000597
0	0	1 PF08031, PPTHR32448, PTHR32441. 3. 3. 8		GO:005511
2	4	1 PF11883, PPTHR27002KOG1187 2. 7. 11. 1		GO:000467
72	59	57 PF03083 PTHR10791KOG1623	K15382	GO:001602
684	797	525 PF00544 PTHR31683, PTHR31684. 2. 2. 2	K01728	
211	215	182 PF00141 PTHR31235 1. 11. 1. 7	K00430	GO:005511
159	143	146 PF00249 PTHR10641KOG0048	K09422	
1857	2015	1860 PF04043 PTHR31080, PTHR31083. 1. 1. 11		GO:000485
289	339	264 PF04043, PPTHR31707, PTHR31703. 1. 1. 11		GO:000485
0	0	0 PF00067 PTHR24296KOG0157		GO:005511
0	0	0		
14	17	21		
0	0	1 PF01501 PTHR11183, PTHR11182. 4. 1. 123		GO:001675
5	7	2 PF00067 PTHR24298, PTHR24291. 14. 13. 68		GO:005511
932	988	1109 PF13632 PTHR32044 2. 4. 1. 32	K13680	
21	19	20 PF13912 PTHR26374, PTHR26374:SF208		
84	88	94 PF01740 PTHR11814, PTHR11814:SF103		GO:005508
9	10	0 PF00249 PTHR10641KOG0048	K09422	
255	243	256 PF00249 PTHR10641KOG0048	K09422	
6	8	11 PF01490 PTHR22950KOG1303		
0	0	0 PTHR33320, PTHR33320:SF10		
593	633	650 PF05278 PTHR21704, PTHR21704:SF19		
0	2	2 PF08263 PTHR32093		
1	5	0 PF00847 PTHR31985, PTHR31985:SF28		GO:000635
24	14	14 PF00332 PTHR32227, PTHR32223. 2. 1. 39		GO:000597
6	8	4 PF01453, PPTHR27002KOG1187 2. 7. 11. 1		GO:000646
613	627	601 PF10604 PTHR33789, PTHR33789:SF5		
125	158	147 PTHR31342, PTHR31342:SF9		
181	200	157 PF03819 PTHR14552, PTHR14553. 6. 1. 12	K16904	
5	1	1 PTHR34808, PTHR34808:SF2		
19	22	15 PF13833 PTHR10891KOG0028		
9	3	5 PF02984, PPTHR10177KOG0656		GO:000563
264	258	184 PF00860 PTHR11119, PTHR11119:SF51		GO:005508
3	0	5 PF00249 PTHR10641KOG0048	K09422	
370	385	381 PF13639 PTHR22937, PTHR22937:SF53		GO:000827
2	2	6 PF02887, PPTHR11817, PTHR11812. 7. 1. 40	K00873	GO:003095
586	579	644 PF03360 PTHR10896KOG1476 2. 4. 2. 24		GO:001602
1659	1668	1870 PF02183, PPTHR24326KOG0483		GO:004356
131	127	155 PF00005, PPTHR19241KOG0061 3. 6. 3. 36		GO:001688
0	3	2 PF00232 PTHR10353, PTHR10353. 2. 1. 21	K01188	GO:000597
16	12	19 PF13962 PTHR24177, PTHR24177:SF19		
48	44	48 PF03018 PTHR21495, PTHR21495:SF80		
200	251	187 PF08541, PPTHR31561, PTHR31562. 3. 1. 199	K15397	GO:001674
25	39	13 PF03514 PTHR31636, PTHR31636:SF19		
5	4	3 PTHR10641, PTHR10641:SF656	K09422	
5	4	5 PF02365 PTHR31719, PTHR31719:SF9		GO:000635

12	14	13 PF04515	PTHR12385KOG1362		
145	159	130 PF00892	PTHR31218, PTHR31218:SF61		GO:001602
686	728	718 PF00069	PTHR13902, PTHR13902.7.11.1	K08867	GO:000646
428	503	406 PF13639, PPTHR22763,	PTHR22766.3.2.19	K11982	GO:000827
22	8	3 PF00234	PTHR33076, PTHR33076:SF4		
38	38	30 PF01471, PPTHR10201,	PTHR10203.4.24.23		GO:003101
225	289	298 PF03009	PTHR22958KOG2421	3.1.4.46	K18696
188	215	167 PF00005, PPTHR19241,	PTHR19241:SF258		GO:001688
3	3	0 PF01556	PTHR24078, PTHR24078:SF266		
7	5	12 PF14543, PPTHR13683KOG1339	3.4.23.12		GO:000650
9	11	7			
18	13	16 PF00026	PTHR13683KOG1339	3.4.23.12	GO:000650
7	6	5 PF00201	PTHR11926KOG1192	2.4.1.271	GO:001675
9	1	2 PF00201	PTHR11926, PTHR11926:SF343		GO:001675
3	0	0 PF00005, PPTHR24221,	PTHR24223.6.3.44	K05658	GO:001688
5	2	2 PF13302	PTHR13256, PTHR13252.3.1.57		GO:000808
31	12	30 PF08263, PPTHR27004KOG0531,	K2.7.11.1		GO:000551
435	498	445 PF03105, PPTHR10783,	PTHR10783:SF53		GO:001602
12	9	17 PF13676, PPTHR11017KOG4658			GO:000716
14	17	10 PF00249	PTHR10641KOG0048	K09422	
9	4	10 PF03169	PTHR31645, PTHR31645:SF1		GO:005508
1	0	0			
1	5	3			
4	3	14 PF00494	PTHR31480KOG4411	2.5.1.32	K02291
16	8	8 PF11883, PPTHR27002KOG1187	2.7.11.1		GO:000467
1	2	0 PF00067	PTHR24298KOG0156		GO:005511
1	4	2	PTHR33743, PTHR33743:SF5		
14	10	8 PF00504	PTHR14154, PTHR14154:SF5		
21	20	16 PF03195	PTHR31529, PTHR31529:SF6		
20	18	13 PF13639	PTHR14155	K10664	GO:000827
48	23	33 PF00450	PTHR11802, PTHR11803.4.16.6	K16297	GO:000650
18	9	18 PF00106	PTHR24320KOG1208	1.1.1.330	GO:001649
9	6	7 PF00201	PTHR11926KOG1192	2.4.1.324	GO:001675
3	3	5 PF14416, PPTHR32285,	PTHR32285:SF38		
16	13	8 PF00010	PTHR12565, PTHR12565:SF172		GO:004698
1	0	1 PF01344	PTHR24412, PTHR24412:SF230		GO:000551
10	15	11	PTHR33974, PTHR33974:SF2		
0	0	1 PF10354	PTHR11538, PTHR11538:SF42	K19307	
18	15	19 PF01477, PPTHR11771,	PTHR11771.13.11.5	K15718	GO:000551
2	4	3 PF00168, PPTHR23180KOG1030		K12486	GO:000551
2	2	2	PTHR37210, PTHR37210:SF2		
0	0	0 PF14226, PPTHR10209KOG0143		K06892	GO:005511
5	11	12 PF00854	PTHR11654KOG1237	K14638	GO:001602
6	9	5 PF03372	PTHR11200KOG0565	3.1.3.56	
6	7	5 PF14009	PTHR33148, PTHR33148:SF3		
7	14	7 PF13855, PPTHR23155,	PTHR23155:SF497		GO:000551
27	14	7 PF12708	PTHR31375, PTHR31373.2.1.15	K01184	
3	1	0 PF00201	PTHR11926, PTHR11926:SF343		GO:001675
6	7	10 PF00295	PTHR31375, PTHR31373.2.1.15		GO:000597
22	18	20 PF13193, PPTHR24096,	PTHR24096.2.1.34,	K01904	GO:000815
11	6	3 PF08100, PPTHR11746KOG3178			GO:004698
3	3	0 PF03405	PTHR31155, PTHR31151.14.19.2	K03921	GO:005511
18	20	6 PF00005, PPTHR19241,	PTHR19243.6.3.29		GO:001688
2	2	2	PTHR23155, PTHR23155:SF518		

182	198	195 PF01595	PTHR12064KOG2118	K16302	
437	431	503 PF03900,	PPTHR11557KOG2892	2. 5. 1. 61	K01749 GO:003301
419	467	513 PF01762,	PPTHR11214KOG2287	2. 4. 1. 134	GO:001602
3440	3416	3950 PF03807,	PPTHR13812, PTHR13811	2. 1. 70	K02492 GO:005511
5083	4664	6224 PF00232	PTHR10353, PTHR10353	2. 1. 21	K01188 GO:000597
441	451	685 PF03330,	PPTHR31867		
279	260	329 PF00106	PTHR24322KOG0725	1. 3. 1. 9	K00208 GO:001649
52	66	40 PF12695	PTHR10655KOG2112	3. 1. 1. 5	K06130
103	105	156 PF01851	PTHR10943		
290	280	376 PF03330,	PPTHR31867, PTHR31867	SF28	
571	628	773 PF13812,	PPTHR24015, PTHR24015	SF366	
2074	2130	2451	PTHR31469, PTHR31469	SF2	
53	45	69 PF02458	PTHR31625, PTHR31622	3. 1. 115	GO:001674
4389	4689	4371 PF06298	PTHR34790, PTHR34790	SF1	K02723 GO:003014
34	35	36			
699	809	731 PF07647	PTHR33915		GO:000551
245	233	264 PF00504	PTHR21649, PTHR21649	SF13	K08908 GO:001602
906	836	1221 PF00205,	PPTHR18968, PTHR18962	2. 2. 1. 6	K01652 GO:003097
115	98	111 PF00249	PTHR10641KOG0048		K09422
742	798	755 PF01678	PTHR31689, PTHR31685	1. 1. 7	K01778 GO:000908
365	308	409	PTHR22835, PTHR22833	1. 1. 3	
32	25	29 PF02535	PTHR11040KOG1558		K14709 GO:005508
4048	4005	3278 PF01157	PTHR20981KOG1732		K02889 GO:000641
68	92	95 PF07883	PTHR31238, PTHR31238	SF41	
402	470	481 PF00582,	PPTHR27001KOG1187	2. 7. 11. 1	GO:000695
133	153	209 PF14416,	PPTHR32285, PTHR32285	SF14	
935	945	953 PF00550	PTHR20863, PTHR20863	SF28	
2081	2443	2835 PF14310,	PPTHR30620, PTHR30623	2. 2. 1. 37	GO:000597
855	779	789 PF00268	PTHR23409	1. 17. 4. 1	K10808 GO:005511
374	369	510 PF02492	PTHR13748, PTHR13748	SF43	
361	454	384 PF00080	PTHR10003KOG0441	1. 15. 1. 1	K04565 GO:005511
76	80	101 PF13410,	PPTHR11260KOG0406	2. 5. 1. 18	K00799 GO:000551
321	419	503 PF03470,	PPTHR21596, PTHR21596	SF12	GO:003104
437	487	472 PF00022	PTHR11937, PTHR11937	SF235	K11340
338	321	438 PF13840,	PPTHR21499KOG0455	1. 1. 1. 3, 2K12524	GO:001659
166	198	184 PF07983	PTHR32227, PTHR32227	SF91	
66	44	45 PF03195	PTHR31529, PTHR31529	SF3	
1387	1356	1289 PF06298	PTHR34790, PTHR34790	SF1	K02723 GO:003014
657	722	814 PF01656,	PPTHR11564, PTHR11563	3. 6. 5. 4	K03106 GO:000661
308	275	252 PF05421	PTHR36049, PTHR36049	SF3	
145	162	181	PTHR35410, PTHR35410	SF1	
2343	2208	2800 PF01764	PTHR21493KOG4569	3. 1. 1. 3	GO:000662
1284	1375	1438 PF00483	PTHR22572KOG1322	2. 7. 7. 27	K00975 GO:001677
952	1000	1104 PF03283	PTHR21562, PTHR21562	SF5	GO:001678
1698	1815	1564 PF05479	PTHR36814, PTHR36814	SF1	K02701 GO:004265
142	139	131 PF12680	PTHR33698, PTHR33695	3. 3. 1	
339	327	281 PF00332	PTHR32227, PTHR32223	3. 2. 1. 39	GO:000597
2963	3352	3453 PF00012	PTHR19375, PTHR19375	SF232	K03283
489	457	483 PF01765	PTHR20982KOG4759		K02838 GO:000641
57	57	79	PTHR37911, PTHR37911	SF1	
416	291	466 PF00201	PTHR11926, PTHR11922	4. 1. 115	GO:001675
631	643	802 PF00173,	PPTHR19353KOG4232	1. 14. 19. 3K13076	GO:000662
9994	9396	8693 PF00504	PTHR21649, PTHR21649	SF26	K08912 GO:001602
364	339	424 PF13174,	PPTHR26312, PTHR26312	SF70	GO:000551

1216	1174	1586 PF01699	PTHR31503, PTHR31503:SF1	K07300	GO:005508
2318	2410	3006 PF00400, PPTHR19876, PTHR19876:SF6		K17302	GO:000551
324	341	363 PF07690	PTHR23500KOG0254	K08145	GO:005508
165	203	229 PF03330, PPTHR31692, PTHR31692:SF5			
4743	4834	4974 PF00004	PTHR32429KOG0651		GO:000552
490	512	690 PF13632	PTHR13301, PTHR13302. 4. 1. 12		
241	336	358 PF07731, PPTHR11709, PTHR11701. 10. 3. 2		K05909	GO:005511
231	264	444 PF00759	PTHR22298, PTHR22293. 2. 1. 4		GO:000597
292	351	295			
2564	3041	3112 PF02518, PPTHR11528, PTHR11528:SF49		K04079	GO:005108
75	64	124 PF03330, PPTHR31867			
979	1019	1094 PF05368	PTHR14194KOG1203		
260	230	282 PF01507	PTHR23293KOG0189 1. 8. 4. 10	K05907	GO:000815
244	247	344 PF05340	PTHR31659, PTHR31659:SF0		
426	463	557 PF05879	PTHR11649, PTHR11649:SF65		
229	289	274 PF00201	PTHR11926, PTHR11922. 4. 1. 273		GO:001675
793	865	993 PF00106	PTHR24322KOG0725 1. 3. 1. 9	K00208	GO:001649
58	43	47			
2130	2111	2011 PF00646, PPTHR24006		K03875	GO:000551
1343	1351	1331 PF00266	PTHR21152KOG2862 2. 6. 1. 51,	K00830	
1080	971	1048 PF06480, PPTHR23076, PTHR23076:SF60		K03798	GO:001602
92	88	59 PF04770	PTHR31948, PTHR31948:SF16		
371	331	312 PF00572	PTHR11545KOG3203	K02871	GO:000641
39	60	36 PF03641	PTHR31223, PTHR31223:SF19	K06966	
93	110	154 PF08263, PPTHR27000KOG1187 2. 7. 11. 1			GO:000551
75	59	60 PF14686, PPTHR32018	4. 2. 2. 23	K18195	
63	48	103 PF00657	PTHR22835, PTHR22833. 1. 1. 3		GO:001678
390	553	731 PF03810, PPTHR11223		K14290	GO:000853
268	243	321 PF00067	PTHR24298KOG0156		GO:005511
223	317	385 PF02704	PTHR23201, PTHR23201:SF8		
223	231	198 PF01789	PTHR31407, PTHR31407:SF4	K02717	GO:001989
3742	4094	4605 PF00012	PTHR19375, PTHR19375:SF228	K09490	
159	221	318 PF14383, PPTHR31680, PTHR31680:SF4			
2136	2251	2735 PF00085, PPTHR23293KOG0189 1. 8. 4. 10,		K05907	GO:004545
128	89	132 PF04043	PTHR31080, PTHR31083. 1. 1. 11		GO:000485
8955	7929	8653 PF01593	PTHR10742, PTHR10741. 5. 3. 14, 1. 5. 3. 15		GO:005511
972	979	1098 PF00390, PPTHR23406, PTHR23401. 1. 1. 40		K00029	GO:005511
2904	2788	2585 PF00504	PTHR21649, PTHR21649:SF28	K08917	GO:001602
287	289	320 PF00187, PPTHR22595, PTHR22595:SF62			GO:000806
308	314	382 PF14577, PPTHR33232			
68	63	69 PF13460	PTHR14194, PTHR14194:SF44		
2402	2356	2449 PF00070	PTHR22912, PTHR22911. 8. 1. 9		GO:005511
160	183	187 PF06886	PTHR31358, PTHR31358:SF6		
82	73	93 PF00854	PTHR11654, PTHR11654:SF73		GO:001602
3606	3514	3793 PF03330, PPTHR31867, PTHR31867:SF9			
796	806	629 PF01241	PTHR34195, PTHR34195:SF2	K02698	GO:001602
561	341	402 PF01370	PTHR10366, PTHR10366:SF375		GO:005066
1766	1801	2114 PF05193, PPTHR11851, PTHR11851. 10. 2. 2		K17732	
166	194	170 PF09585	PTHR34784		
660	685	720 PF06273	PTHR32091, PTHR32091:SF5		
272	236	264	PTHR35994		
1832	1766	1958 PF13288, PPTHR30525, PTHR30521. 1. 1. 267		K00099	GO:000551
171	212	221 PF04851, PPTHR24031, PTHR24033. 6. 4. 13		K17679	GO:001678
203	197	287 PF16499	PTHR11452KOG2366 3. 2. 1. 22		

1707	1664	1764 PF00892	PTHR31218, PTHR31218:SF29		GO:001602
560	546	639 PF00348	PTHR12001KOG0776	2. 5. 1. 29 K13789	GO:000829
317	260	320	PTHR33156, PTHR33156:SF10		
416	481	618 PF08031, PPTHR32448, PTHR32441.	3. 3. 8		GO:005511
53	68	71 PF07649, PPTHR13871KOG2501	1. 8. 1. 8 K17609		GO:005511
1129	1251	1175 PF02453	PTHR10994KOG1792		
95	69	105 PF08880, PPTHR31602, PTHR31602:SF17			GO:000635
448	436	538 PF00450	PTHR11802, PTHR11803.	4. 16. 6 K16297	GO:000650
708	846	780 PF00067	PTHR24298KOG0156	1. 14. 13. 2K05280	GO:005511
26	38	48 PF04578, PPTHR31325, PTHR31325:SF0			
2315	2815	3823 PF14547	PTHR31731		
1432	1303	1267 PF00389, PPTHR10996KOG0069	1. 1. 1. 81, K15893		GO:005511
613	597	619 PF01016	PTHR15893KOG4600	K02899	GO:000641
946	951	970 PF08669, PPTHR13847, PTHR13842.	1. 2. 10 K00605		GO:000654
111	130	175 PF13041	PTHR24015, PTHR24015:SF572		
3547	3699	3741 PF00076	PTHR24012		GO:000367
404	477	555 PF05922, PPTHR10795, PTHR10793.	4. 14. 10		GO:000650
117	100	126 PF00231	PTHR11693KOG1531	3. 6. 3. 14 K02115	GO:004696
84	74	110 PF03018	PTHR21495, PTHR21495:SF59		
1574	1545	1811 PF10417, PPTHR10681KOG0852	1. 11. 1. 15K03386		GO:005511
475	526	720 PF00067	PTHR24298KOG0156	1. 14. 13. 88	GO:005511
98	84	89	PTHR37231, PTHR37231:SF1		
400	406	516 PF00657	PTHR22835, PTHR22833.	1. 1. 3	GO:001678
4600	4606	4807 PF00121	PTHR21139KOG1643	5. 3. 1. 1 K01803	GO:000815
75	45	62 PF00583	PTHR23091, PTHR23091:SF239		GO:000808
305	364	462 PF08263, PPTHR27000KOG1187	2. 7. 11. 1		GO:000646
212	222	192 PF00466	PTHR11560, PTHR11560:SF8	K02864	GO:004225
79	74	75 PF04755	PTHR31906, PTHR31906:SF11		
45	39	39 PF10664	PTHR36900, PTHR36900:SF1		GO:005511
607	742	836 PF01554	PTHR11206KOG1347		GO:005508
98	114	118 PF04548, PPTHR10903, PTHR10903.	6. 5. 2		GO:000552
45	35	44 PF13812, PPTHR24015, PTHR24015:SF736			
159	180	187 PF08659	PTHR24322KOG0725	K11147	
1475	1433	1332 PF06596	PTHR34455, PTHR34455:SF1		GO:001602
227	254	333 PF00483	PTHR22572KOG1322	2. 7. 7. 27 K00975	GO:001677
5080	5736	5620 PF03141	PTHR10108, PTHR10102.	1. 1. 157	GO:000816
1429	1330	1148 PF04398	PTHR31676, PTHR31676:SF10		
455	394	501 PF10184	PTHR36334, PTHR36334:SF1		
612	565	553 PF00125, PPTHR23430KOG1756		K11251	GO:000367
6542	5583	5692 PF13410, PPTHR11260KOG1422	1. 8. 5. 1		GO:000551
62	81	74 PF00628, PPTHR12505			GO:000551
676	611	717 PF00314	PTHR31048, PTHR31048:SF7		
2215	2400	2475 PF03144, PPTHR23115, PTHR23113.	6. 5. 3 K03231		GO:000552
1355	1394	1387	PTHR33597, PTHR33597:SF2		
167	151	171 PF04725	PTHR34369, PTHR34369:SF2	K03541	GO:004265
458	486	528 PF06814	PTHR21229, PTHR21229:SF15		GO:001602
87	114	122 PF02519	PTHR31929	K14488	GO:000973
101	83	119 PF08031, PPTHR32448, PTHR32441.	3. 3. 8		GO:005511
6051	6007	6719 PF03952, PPTHR11902, PTHR11904.	2. 1. 11 K01689		GO:000609
2565	2269	2594 PF01134	PTHR10617, PTHR10611.	3. 1. 83 K10960	GO:005066
384	380	373 PF05368	PTHR14194KOG1203	1. 3. 1. 75 K19073	
3960	3896	3975 PF01789	PTHR31407, PTHR31407:SF6	K02717	GO:001989
750	877	823 PF00150	PTHR31451, PTHR31453.	2. 1. 78 K19355	GO:000597
869	891	1115 PF08541, PPTHR31561, PTHR31562.	3. 1. 199K15397		GO:001674

90	84	107 PF02458	PTHR31642, PTHR31642. 3. 1. 99	K13065	GO:001674
707	841	916 PF07983	PTHR32227, PTHR32227:SF75		
413	442	406 PF01966	PTHR11845KOG3197	K07023	
420	544	547 PF00271, PPTHR24031KOG0331	3. 6. 4. 13		GO:000552
2362	2219	2424 PF08263	PTHR27000KOG4579 3. 5. 1. 98		
388	337	377 PF00380	PTHR21569KOG1753	K02996	GO:000641
372	540	757 PF02140, PPTHR23421, PTHR23423.	2. 1. 23		GO:003024
33	35	38 PF00561	PTHR10992KOG4178 3. 3. 2. 10		
147	146	136	PTHR34687, PTHR34687:SF1		
1746	2058	2745 PF00544	PTHR31683, PTHR31684. 2. 2. 2	K01728	
883	842	806 PF00333, PPTHR13718KOG0877		K02988	GO:000641
276	298	374 PF00026	PTHR13683KOG1339 3. 4. 23. 12		GO:000650
711	530	598	PTHR34686, PTHR34686:SF1		
129	139	190 PF08241, PPTHR10108KOG1269	2. 1. 1. 41	K00559	GO:000816
16	25	19 PF00520	PTHR10217KOG0498	K05391	GO:005508
282	361	350 PF01554	PTHR11206KOG1347	K03327	GO:005508
236	257	310 PF00298, PPTHR11661KOG3257		K02867	GO:000641
175	198	271 PF14416, PPTHR32285, PTHR32285:SF65			
1348	1350	1439 PF01073, PPTHR11540	1. 1. 1. 37	K00026	GO:005511
457	484	578 PF00408, PPTHR22573, PTHR22575.	4. 2. 2, 5	K01835	GO:007170
362	339	373 PF07816	PTHR33095, PTHR33095:SF14		
11572	11391	9532 PF01789	PTHR31407, PTHR31407:SF6	K02717	GO:001989
139	96	91 PF07883	PTHR31238, PTHR31238:SF21		
954	970	1019	PTHR36391, PTHR36391:SF1		
940	1041	1067 PF01501	PTHR32116, PTHR32112. 4. 1. 43	K13648	GO:001675
437	431	463 PF00831	PTHR10916KOG3436	K02904	GO:000641
60	81	86	PTHR36359, PTHR36359:SF1		
78	78	106 PF05199, PPTHR11552, PTHR11552:SF69		K15403	GO:005511
89	89	104 PF03171, PPTHR10209KOG0143			GO:005511
214	195	220 PF02163	PTHR31412, PTHR31412:SF0		GO:000650
307	242	289	PTHR35115, PTHR35115:SF1		
192	167	214 PF13671	PTHR11055KOG0635 2. 7. 1. 25	K00860	
383	396	386 PF00378	PTHR11941KOG1684 3. 1. 2. 4	K05605	GO:000815
126	152	119 PF00657	PTHR22835, PTHR22833. 1. 1. 3		GO:001678
1194	1271	1504 PF00162	PTHR11406, PTHR11402. 7. 2. 3	K00927	GO:000609
556	561	502 PF07722, PPTHR11405, PTHR11406.	3. 5. 5		GO:001678
52	50	49 PF13181	PTHR36326, PTHR36326:SF1		GO:000551
1378	1484	2210 PF13632, PPTHR13301, PTHR13302.	4. 1. 12	K10999	
541	592	542 PF00076	PTHR24012KOG0131	K13126	GO:000367
727	851	954 PF00118	PTHR11353, PTHR11353:SF80	K04077	GO:000552
403	424	599 PF13632, PPTHR13301, PTHR13302.	4. 1. 12	K10999	
152	98	142	PTHR33210, PTHR33210:SF6		
1456	1446	1567 PF00285	PTHR11739, PTHR11732. 3. 3. 16,	K01647	GO:004691
282	357	371 PF04043	PTHR31707, PTHR31707:SF43		GO:000485
38	60	55 PF00432	PTHR11764, PTHR11765. 4. 99. 8		GO:000382
3936	4107	3935 PF03719, PPTHR13718KOG0877		K02981	GO:000641
959	983	1147 PF02140, PPTHR23421, PTHR23423.	2. 1. 23		GO:003024
232	181	283 PF00657	PTHR22835, PTHR22833. 1. 1. 3		GO:001678
79	88	107 PF07731, PPTHR11709, PTHR11701.	10. 3. 2	K05909	GO:005511
451	430	426 PF00111	PTHR19370, PTHR19370:SF109		GO:005153
1040	1206	1296 PF00118	PTHR11353, PTHR11353:SF80	K04077	GO:000552
97	116	186 PF01964	PTHR30557, PTHR30554. 1. 99. 17	K03147	GO:005153
683	656	777 PF02309	PTHR31734, PTHR31734:SF30	K14484	GO:000635
1385	1179	1054 PF14368	PTHR33122, PTHR33122:SF8		

2856	3073	3487 PF06955, PPTHR31062, PTHR31062. 4. 1. 207	K08235	GO:004804
261	275	244 PF01132, PPTHR30053, PTHR30053:SF3	K02356	GO:000641
48	36	44 PF00504 PTHR21649, PTHR21649:SF7	K08907	GO:001602
1755	1927	2155 PF01073 PTHR10366KOG1429 4. 1. 1. 35	K12449	GO:005511
1690	1787	2325 PF13632 PTHR32044, PTHR32042. 4. 1. 32	K13680	
236	257	240 PF00070 PTHR22912 1. 6. 5. 9	K17871	GO:005511
657	895	1092 PF02469 PTHR32382, PTHR32382:SF13		
1762	1309	1756 PF00067 PTHR24298KOG0156 1. 14. 13. 21		GO:005511
1032	1144	1138 PF00180 PTHR11835, PTHR11831. 1. 1. 85	K00052	GO:005511
855	800	738 PF00970, PPTHR19370, PTHR19371. 6. 2. 2	K00326	GO:005511
312	257	240 PTHR34283, PTHR34283:SF1		
495	514	606 PF01118, PPTHR10174KOG4777 1. 2. 1. 11	K00133	GO:005511
176	172	185 PF00450 PTHR11802, PTHR11803. 4. 16. 6	K16297	GO:000650
236	231	248 PF13193, PPTHR24095KOG1177 6. 2. 1. 26	K14760	GO:000815
548	602	650 PF00575 PTHR10724, PTHR10724:SF7	K02945	GO:000367
448	513	528 PF00450 PTHR11802KOG1282 3. 4. 16. 5	K16298	GO:000650
196	222	213 PF01041 PTHR11751KOG0257		
254	227	303 PTHR35744, PTHR35744:SF1		
131	135	160 PF12068		
2205	2071	1876 PF14159 PTHR33222, PTHR33222:SF4		
60	79	64 PF01734 PTHR32176KOG0513 3. 1. 1. 26		GO:000662
140	127	145 PF08241 PTHR10108KOG1269		GO:000816
67	83	109 PF08144 PTHR13389KOG2050	K14844	GO:000372
3718	4139	3989 PF07991, PPTHR21371, PTHR21371. 1. 1. 86	K00053	GO:005511
95	96	173 PF00664, PPTHR24223, PTHR24223. 6. 3. 44		GO:005508
73	83	107 PF00122, PPTHR24092, PTHR24093. 6. 3. 1	K14802	GO:004687
971	1100	1182 PF06026 PTHR11934KOG3075 5. 3. 1. 6	K01807	GO:000905
67	67	69 PF00316 PTHR11556, PTHR11553. 1. 3. 11	K03841	GO:004257
114	98	152 PF02225, PPTHR10795, PTHR10793. 4. 21. 25		GO:000650
588	649	741 PF14551, PPTHR11630 3. 6. 4. 12	K02541	GO:000626
798	882	975 PF12708 PTHR31375, PTHR31373. 2. 1. 15		
309	390	433 PF09739 PTHR13489, PTHR13489:SF0		
4574	4387	3938 PF02531 PTHR31982, PTHR31982:SF4	K02692	GO:001597
638	810	856 PF14497, PPTHR11260KOG1627	K03233	GO:000551
208	225	234 PF14310, PPTHR30620, PTHR30623. 2. 1. 55, 3. 2. 1. 37		GO:000597
539	567	779 PF00657 PTHR22835, PTHR22833. 2. 1. 51		GO:001678
369	467	573 PF01095 PTHR31321, PTHR31323. 1. 1. 11	K01051	GO:004254
76	69	64 PF03107, PPTHR13871, PTHR13871:SF51		GO:005511
193	214	179 PF00595, PPTHR32060, PTHR32063. 4. 21. 102		GO:000551
293	236	287 PF01554 PTHR11206KOG1347	K03327	GO:005508
91	87	100 PF04770 PTHR31948, PTHR31948:SF18		
805	860	973 PF01625 PTHR10173KOG1635 1. 8. 4. 11	K07304	GO:005511
250	234	267 PF12049 PTHR33102, PTHR33102:SF2		
144	133	182 PF04116, PPTHR11863, PTHR11863:SF41	K15404	GO:005511
134	103	112 PF07690 PTHR23500KOG0254		GO:005508
73	111	115 PF00170 PTHR13301, PTHR13301:SF52		GO:004356
889	958	973 PF00160 PTHR11071KOG0880 5. 2. 1. 8	K03768	GO:000645
892	879	956 PF00281, PPTHR11994KOG0398	K02931	
221	240	241 PF00046, PPTHR24326KOG0483	K09338	GO:000367
99	100	113 PTHR33312, PTHR33312:SF5		
11301	11052	9564 PTHR33403, PTHR33403:SF1	K18635	
1561	1465	1433 PF03951, PPTHR20852, PTHR20856. 3. 1. 2	K01915	GO:000680
8637	9422	10192 PF03144, PPTHR23115, PTHR23113. 6. 5. 3	K03231	GO:000552
281	269	358 PF00400 PTHR22844, PTHR22842. 7. 11. 7		GO:000551

195	282	243 PF15699	PTHR33669, PTHR33669:SF2		
6076	5975	5319 PF00504	PTHR21649, PTHR21649:SF7	K08907	GO:001602
289	315	279 PF01459	PTHR10802KOG3296	K11518	GO:005508
67	42	57 PF04720	PTHR31579, PTHR31579:SF10		
755	890	1006 PF02518, PPTHR11528, PTHR11528:SF41		K09487	GO:005108
255	294	267	PTHR11716, PTHR11713. 1. 1. 4	K01047	GO:001604
551	505	528 PF03171, PPTHR10209KOG0143	1. 14. 11. 9		GO:005511
67	103	96	PTHR31288, PTHR31288:SF8		
282	239	225 PF13326	PTHR34041, PTHR34041:SF1	K08902	GO:001020
747	695	711 PF00282	PTHR11999KOG0629	4. 1. 1. 22 K01590	GO:003017
111	113	127 PF06418	PTHR11550, PTHR11556. 3. 4. 2		GO:000622
77	70	81	PTHR35697, PTHR35697:SF1		
444	372	348 PF00111	PTHR19370, PTHR19370:SF120	K02639	GO:005153
1118	1108	1244 PF00349, PPTHR19443, PTHR19442. 7. 1. 1		K00844	GO:001677
361	349	348 PF14432, PPTHR24015, PTHR24015:SF552			
208	222	261 PF12708	PTHR31375, PTHR31373. 2. 1. 15	K01213	
214	210	238 PF05577	PTHR11010, PTHR11013. 4. 16. 2	K01285	GO:000823
717	568	636 PF00132, PPTHR23416KOG4750	2. 3. 1. 30	K00640	GO:000900
170	258	403 PF00575	PTHR11741, PTHR11741:SF3	K02357	GO:000367
803	667	1010 PF05922, PPTHR10795, PTHR10793. 4. 14. 10			GO:000650
2921	3004	2877 PF02672, PPTHR10836KOG0657	1. 2. 1. 13	K05298	GO:005511
90	93	94 PF01263	PTHR10091KOG1604	5. 1. 3. 3 K01785	GO:001685
253	267	308 PF03129, PPTHR11451, PTHR11456. 1. 1. 15		K01881	GO:000643
1297	1298	1442 PF02518, PPTHR11528, PTHR11528:SF41		K09487	GO:005108
1828	1800	2110 PF00984, PPTHR11374, PTHR11371. 1. 1. 22		K00012	GO:005511
1221	1186	1161 PF00347	PTHR11655KOG3254	K02933	GO:001984
394	471	389 PF00076	PTHR24012KOG0131		GO:000367
265	274	280 PF01535, PPTHR24015, PTHR24015:SF579			
314	295	369 PF16198, PPTHR13767KOG2529	5. 4. 99. 25	K03177	GO:000639
438	440	509 PF03765, PPTHR23324KOG1471			
141	151	163 PF00230	PTHR19139KOG0223	K09874	GO:001602
5477	5032	5222 PF00504	PTHR21649, PTHR21649:SF4	K08910	GO:001602
56	59	72 PF07498	PTHR34449, PTHR34449:SF1		GO:000635
185	175	221 PF08100, PPTHR11746KOG3178			GO:004698
445	415	562	PTHR33621, PTHR33621:SF2		
164	209	208 PF01336, PPTHR22594, PTHR22596. 1. 1. 12		K01876	GO:000367
2383	2543	2222 PF07885	PTHR11003, PTHR11003:SF135	K05389	
441	516	360 PF13414	PTHR36326, PTHR36326:SF1		
28	34	31 PF14686, PPTHR32018, PTHR32014. 2. 2. 23		K18195	
54	51	58 PF02365	PTHR31989, PTHR31989:SF6		GO:000635
80	89	59 PF00111	PTHR19370, PTHR19370:SF127	K02639	GO:005153
84	48	97 PF00232	PTHR10353	3. 2. 1. 21, K01188	GO:000597
158	197	193 PF04536	PTHR30373, PTHR30373. 1. 3. 2		
1115	1210	2010 PF15044, PPTHR12601, PTHR12601:SF18		K03255	
1633	1504	2074 PF03144, PPTHR23115, PTHR23113. 6. 5. 3		K02358	GO:000552
273	211	293 PF00067	PTHR24298KOG0156	K00517	GO:005511
630	575	557 PF01370	PTHR10366, PTHR10366:SF278		GO:005066
24957	24674	22182 PF00504	PTHR21649, PTHR21649:SF8	K08913	GO:001602
643	753	653 PF04043	PTHR31080, PTHR31083. 1. 1. 11		GO:000485
10478	10556	8635 PF02507	PTHR34939, PTHR34931. 97. 1. 12	K02694	GO:001597
1274	910	1282 PF01370	PTHR32487, PTHR32481. 3. 1. 3		GO:005066
500	394	553 PF00560, PPTHR27000KOG4579	3. 5. 1. 98		GO:000551
5028	4734	4574 PF00504	PTHR21649, PTHR21649:SF11	K08914	GO:001602
74	79	83 PF14215	PTHR13902, PTHR13902:SF64		

87	80	72 PF01095	PTHR31321, PTHR31323. 1. 1. 11		GO:004254
398	331	356 PF00155	PTHR11808KOG0053 4. 4. 1. 11	K01761	GO:003017
92	60	79			
68	86	114 PF07883	PTHR31238, PTHR31238:SF21		
191	215	220 PF00696	PTHR23342KOG1154 2. 7. 2. 8	K00930	
669	674	740 PF05761	PTHR12103KOG2469 3. 1. 3. 5		
206	242	252 PF11891	PTHR31620, PTHR31620:SF9		
36	21	36 PF03171, PPTHR10209KOG0143	4. 2. 3. 19		GO:005511
250	308	307 PF00464	PTHR11680, PTHR11682. 1. 2. 1	K00600	GO:001674
36	48	50 PF00320	PTHR10071, PTHR10071:SF197		GO:004356
859	818	905 PF00487, PPTHR32100, PTHR32101. 14. 99. 3	K10257		GO:000662
208	226	204 PF03435	PTHR12286, PTHR12281. 5. 1. 43		GO:005511
785	803	876 PF00132	PTHR13061, PTHR13061. 6. 5. 3		
909	788	862 PF00829	PTHR21349KOG1686	K02888	GO:000584
37	28	29 PF04043	PTHR31080, PTHR31083. 1. 1. 11		GO:000485
1083	1117	965 PF00366	PTHR10744KOG1740	K02961	GO:000641
456	450	407	PTHR33156, PTHR33156:SF7		
1047	1153	999 PF00132, PPTHR22572, PTHR22572. 7. 7. 22,	K00966		
1295	1447	1425 PF00291	PTHR10314, PTHR10314. 2. 1. 20	K01696	
374	448	516 PF03953, PPTHR11588, PTHR11582. 4. 2. 1	K07375		GO:000392
560	523	662 PF02458	PTHR31896, PTHR31892. 3. 1. 99		GO:001674
299	262	489			
47	36	67			
860	960	1070 PF00571, PPTHR11911, PTHR11915. 3. 1. 13	K06041		GO:003024
259	265	372 PF03181	PTHR31458, PTHR31458:SF3		
1322	1558	1642 PF16940	PTHR34935		
7915	7783	7624 PF00504	PTHR21649, PTHR21649:SF6	K08915	GO:001602
14	32	22 PF03214	PTHR31903, PTHR31905. 4. 99. 30		GO:003024
36	40	47	PTHR34463		
532	615	822 PF05303, PPTHR12601, PTHR12601:SF6			
78	67	87 PF00581	PTHR12231, PTHR12231:SF150		
1035	1078	1049 PF00467	PTHR12903KOG1708	K02895	GO:000641
230	282	259 PF00380	PTHR21569KOG1753	K02996	GO:000641
193	193	157 PF01063	PTHR11825KOG0975 2. 6. 1. 88,	K00826	GO:000815
121	128	202	PTHR31344, PTHR31344:SF4		
158	168	197 PF00651, PPTHR32370, PTHR32370:SF37			GO:000551
738	767	884 PF01053	PTHR11808, PTHR11804. 4. 1. 11		GO:003017
452	458	499 PF00856, PPTHR13271KOG1337 2. 1. 1. 127			GO:000551
266	288	355 PF00696	PTHR21499, PTHR21492. 7. 2. 4	K00928	
1377	1374	1222 PF00155	PTHR11879, PTHR11872. 6. 1. 1	K00811	GO:003017
1128	988	1007 PF01241	PTHR34195, PTHR34195:SF1	K08905	GO:001602
2920	2967	2820 PF00274	PTHR11627, PTHR11624. 1. 2. 13	K01623	GO:000609
1088	1089	1145 PF00291	PTHR10314KOG1252 2. 5. 1. 47	K01738	
289	221	332	PTHR33083, PTHR33083:SF5		
497	522	676 PF13802, PPTHR22762, PTHR22763. 2. 1. 20	K01187		GO:000597
295	280	271 PF05922, PPTHR10795, PTHR10793. 4. 14. 10			GO:000650
904	747	800 PF00081, PPTHR11404KOG0876 1. 15. 1. 1	K04564		GO:005511
575	654	721 PF00450	PTHR11802KOG1283 3. 4. 16. 5	K09646	GO:000650
117	193	190	PTHR36748		
204	208	232 PF00861	PTHR12899	K02881	GO:000641
166	220	237 PF02704	PTHR23201, PTHR23201:SF4		
161	174	179 PF00155	PTHR11879, PTHR11872. 6. 1. 1	K00811	GO:003017
156	149	163 PF00425	PTHR11236KOG1223 5. 4. 4. 2	K02552	GO:000905
571	578	573	PTHR35753, PTHR35753:SF1		

1127	1123	1087 PF00297	PTHR11229KOG3141	K02906	GO:000641
462	481	484 PF00291	PTHR10314, PTHR10314. 2. 1. 20	K01696	
549	632	847 PF00026	PTHR13683KOG1339 3. 4. 23. 12		GO:000650
210	245	220 PF00013	PTHR10288KOG2190	K13162	GO:000372
280	326	290 PF12327, PPTHR30314, PTHR30313. 6. 5. 6		K03531	GO:000392
2564	2257	2460 PF02812, PPTHR11606, PTHR11601. 4. 1. 3		K00261	GO:005511
66	56	73 PF13410, PPTHR32419KOG2903		K07393	GO:000551
19	26	41 PF07731, PPTHR11709, PTHR11701. 10. 3. 2		K05909	GO:005511
1155	1089	1090 PF01564	PTHR11558KOG1562 2. 5. 1. 16	K00797	
92	102	140 PF01208	PTHR21091, PTHR21094. 1. 1. 37	K01599	GO:000677
868	844	904 PF13489, PPTHR10108KOG1269 2. 1. 1. 103		K05929	GO:000816
699	609	577 PF01625	PTHR10173KOG1635 1. 8. 4. 11	K07304	GO:005511
7964	9047	10971 PF02518, PPTHR11528, PTHR11528:SF45		K09487	GO:005108
87	84	121 PF02861, PPTHR11638, PTHR11638:SF116		K03695	GO:001953
331	352	387 PF00814	PTHR11735, PTHR11732. 6. 99. 4	K01409	
194	189	225 PF00254	PTHR10516KOG0552 5. 2. 1. 8		GO:000645
1854	1840	1560	PTHR36389, PTHR36389:SF1		
90	75	77 PF07883	PTHR31238, PTHR31238:SF39		
113	148	123 PF08449	PTHR10778KOG1581	K15275	GO:005508
4024	4157	3833	PTHR36311, PTHR36311. 97. 1. 12	K14332	
85	110	114 PF01501	PTHR32116, PTHR32112. 4. 1. 43	K13648	GO:001675
215	207	224 PF05368	PTHR14194KOG1203		
1796	1959	1961 PF13473	PTHR34192, PTHR34192:SF2	K02638	
318	310	300	PTHR36793, PTHR36793:SF1		
290	263	331	PTHR35742, PTHR35742:SF1		
264	169	283 PF07859	PTHR23024KOG1515 4. 2. 1. 105, 3. 1. 1. 1		GO:001678
827	847	897 PF00175	PTHR19370KOG0534 1. 12. 98. 4		GO:005511
115	79	75 PF00314	PTHR31048, PTHR31048:SF36		
544	569	553 PF13847	PTHR10108, PTHR10108:SF791		
1122	997	970 PF01250	PTHR21011, PTHR21011:SF1	K02990	GO:001984
2540	2041	2976 PF00067	PTHR24298, PTHR24291. 14. 13. 21		GO:005511
296	317	676 PF01190	PTHR23201		
63	45	77 PF00230	PTHR19139KOG0223	K09872	GO:001602
118	60	111	PTHR33210, PTHR33210:SF6		
213	278	266	PTHR36398, PTHR36398:SF1		
226	274	345 PF07766	PTHR14009KOG1043		
295	248	373 PF08534	PTHR10681KOG0855 1. 11. 1. 15	K03564	GO:001649
85	106	243 PF08263	PTHR32093KOG4579		
128	96	153 PF00396, PPTHR12411KOG1542 3. 4. 22. 14			GO:000823
76	82	83 PF11883, PPTHR27002KOG1187 2. 7. 11. 1			GO:000467
443	463	421 PF00248	PTHR11732KOG1575 1. 1. 1. 65		
13	16	10	PTHR35476, PTHR35476:SF2		
79	97	96	PTHR36014, PTHR36014:SF1		
27	26	24 PF04690	PTHR31675, PTHR31675:SF6		GO:000727
26	34	33 PF01370, PPTHR11011KOG1221 1. 2. 1. 84		K13356	GO:005066
1658	1713	1870	PTHR11177, PTHR11177:SF167	K17525	
250	280	411 PF00005, PPTHR24221, PTHR24223. 6. 3. 44		K05658	GO:001688
115	121	125 PF13920, PPTHR12183KOG4172			
785	684	770 PF00828	PTHR12934KOG0846	K02876	GO:001593
98	109	107	PTHR10168, PTHR10168:SF94		
345	388	384 PF07137	PTHR33970, PTHR33971. 10. 99. 3	K09839	GO:005511
151	156	178 PF00202	PTHR11986KOG1401 2. 6. 1. 11	K00818	GO:003017
160	155	188 PF13364, PPTHR23421, PTHR23423. 2. 1. 23			GO:003024
6212	6210	7204 PF00162	PTHR11406, PTHR11402. 7. 2. 3	K00927	GO:000609

111	149	159 PF00657	PTHR22835, PTHR22833. 1. 1. 3	GO:001678
873	1007	1148 PF01734	PTHR32241KOG0513	GO:000662
674	602	613 PF13414	PTHR36326, PTHR36326:SF1	
2078	1977	1934 PF00175	PTHR19384, PTHR19381. 18. 1. 2, K02641	GO:005511
1677	1806	1851 PF07991, PPTHR10996,	PTHR10991. 1. 1. 95 K00058	GO:001659
469	422	516 PF00390, PPTHR23406,	PTHR23401. 1. 1. 40 K00029	GO:005511
192	197	270	PTHR33971, PTHR33971:SF1	
1990	2028	2000 PF16363	PTHR10366, PTHR10364. 2. 1. 47 K01711	
5168	5181	4922 PF00504	PTHR21649, PTHR21649:SF11 K08914	GO:001602
469	523	514 PF00067	PTHR24298KOG0156	GO:005511
141	170	208 PF07731, PPTHR11709,	PTHR11701. 10. 3. 2 K05909	GO:005511
58	78	96 PF07517	PTHR30612, PTHR30612:SF4	GO:001703
675	817	762 PF00150	PTHR31451, PTHR31453. 2. 1. 78 K19355	GO:000597
369	327	396 PF00230	PTHR19139KOG0223 K09873	GO:001602
297	215	348 PF13193, PPTHR24095,	PTHR24096. 2. 1. 1	GO:000815
1792	1728	1661 PF16320, PF00542	KOG1715 K02935	GO:000641
530	574	540 PF01612	PTHR13620KOG4373 3. 6. 4. 12	GO:000840
179	186	143 PF14497, PPTHR12782	KOG3029 5. 3. 99. 3 K05309	GO:000551
533	503	558 PF01196	PTHR14413KOG3280 K02879	GO:000641
520	561	575 PF14870	PTHR32010, PTHR32010:SF6	
2406	2442	2392 PF00106	PTHR24322KOG1208 1. 3. 1. 33, K00218	GO:001649
38	29	30 PF03016	PTHR11062KOG1021 2. 4. 2. 41	
2300	2308	2089 PF14159	PTHR33222, PTHR33222:SF4	
51	61	63 PF03552	PTHR13301, PTHR13302. 4. 1. 12	GO:003024
2075	1950	1981 PF00101	PTHR31262 4. 1. 1. 39 K01602	
528	551	677 PF00390, PPTHR23406,	PTHR23401. 1. 1. 39 K00028	GO:005511
415	354	336	PTHR34678, PTHR34678:SF1 K19034	
651	632	589 PF00334	PTHR11349KOG0888 2. 7. 4. 6 K00940	GO:000624
87	110	146 PF05922, PPTHR10795,	PTHR10793. 4. 21. 25	GO:000650
63	76	61 PF00168, PPTHR10336,	PTHR10333. 1. 4. 11 K05857	GO:000551
1673	1504	1933 PF14306, PPTHR11055,	PTHR11052. 7. 7. 4 K13811	GO:000478
704	635	693 PF16113	PTHR11941KOG1680 4. 1. 3. 36 K01661	
348	359	336 PF00542	PTHR24089KOG1715 K02935	GO:000641
95	113	167 PF01225, PPTHR23135,	PTHR23136. 3. 2. 37, 6. 3. 2. 7	GO:000905
492	567	562 PF14551, PPTHR11630,	PTHR11633. 6. 4. 12 K02212	GO:000626
1174	1200	1878 PF07731, PPTHR11709,	PTHR11701. 10. 3. 3	GO:005511
8893	9464	10702 PF03283	PTHR21562, PTHR21562:SF4	GO:001678
1145	1258	1578 PF09261, PPTHR11607,	PTHR11603. 2. 1. 24 K01191	GO:000827
805	916	749	PTHR34946	
509	566	662 PF08156, PPTHR10894,	PTHR10894:SF0 K14564	
541	533	511	PTHR37182	
594	547	907 PF03181	PTHR31236, PTHR31236:SF2	
1348	1135	1241 PF13410, PPTHR11260	KOG0406 2. 5. 1. 18 K00799	GO:000551
345	298	351		
1575	1149	1227 PF04725	PTHR34369, PTHR34369:SF2 K03541	GO:004265
468	482	442 PF04852	PTHR31165, PTHR31165:SF10	
81	63	78 PF00168, PPTHR10067,	PTHR10064. 1. 1. 65 K01613	GO:000551
52	64	90 PF03352	PTHR31116, PTHR31113. 2. 2. 20 K01246	GO:000872
527	578	511 PF13225	PTHR33591, PTHR33595. 2. 1. 14	
376	371	296 PF03195	PTHR31304, PTHR31304:SF5	
970	936	888	PTHR36315, PTHR36315:SF1	
465	574	461 PF12708	PTHR31339, PTHR31339:SF7	
1195	1345	1386 PF00202	PTHR11986, PTHR11985. 4. 3. 8 K01845	GO:003017
1696	1815	2417 PF01565	PTHR10801, PTHR10801. 3. 1. 72 K09828	GO:005511

156	94	156 PF01477, PPTHR11771, PTHR11771. 13. 11. 1	K00454	GO:000551	
1250	1335	1411 PF00171	PTHR11699, PTHR11691. 2. 1. 9	K00131 GO:005511	
199	244	249 PF08246, PPTHR12411	KOG1543 3. 4. 22. 6	K16290 GO:000823	
173	134	197 PF00160	PTHR11071, PTHR11075. 2. 1. 8	GO:000645	
1770	1777	1936 PF07649, PPTHR13871	KOG2501 1. 8. 1. 8	K17609 GO:005511	
1638	1800	1754 PF14204, PPTHR23410	KOG0875	K02932 GO:000641	
422	448	582 PF00010	PTHR12565, PTHR12565:SF149	GO:004698	
2981	2309	2849 PF01370	PTHR32487, PTHR32481. 3. 1. 3	GO:005066	
349	394	495 PF16499	PTHR11452	KOG2366 3. 2. 1. 22	K07407
616	413	624 PF02458	PTHR31642, PTHR31642. 3. 1. 196	GO:001674	
506	501	570 PF00160	PTHR11071	KOG0884 5. 2. 1. 8	GO:000645
405	457	523 PF00067	PTHR24298	KOG0156	GO:005511
115	109	127 PF00298, PPTHR11661	KOG3257	GO:000641	
28	27	24 PF00067	PTHR24298	KOG0156	K00517 GO:005511
332	410	485 PF03352	PTHR31116, PTHR31113. 2. 2. 20	K01246 GO:000872	
279	311	475 PF07731, PPTHR11709,	PTHR11701. 10. 3. 3	GO:005511	
2034	2205	2293 PF03953, PPTHR11588,	PTHR11582. 4. 2. 1	K07375 GO:000392	
2236	2322	2493 PF00390, PPTHR23406,	PTHR23401. 1. 1. 39	K00028 GO:005511	
2024	1847	2105 PF02502	PTHR30345, PTHR30345. 3. 1. 6	GO:001685	
463	468	427 PF06596	PTHR34455, PTHR34455:SF1	GO:001602	
290	299	492 PF08263, PPTHR27000	KOG1187 2. 7. 11. 1	GO:000551	
86	97	95	PTHR35697, PTHR35697:SF1		
126	160	180 PF00067	PTHR24286	KOG0157 1. 14. 13. 1	K12637 GO:005511
307	313	312 PF00805	PTHR14136		
1432	1320	1589 PF00067	PTHR24298	KOG0156 1. 14. 13. 21	GO:005511
1589	1501	1791 PF01070	PTHR10578, PTHR10571. 1. 3. 15	K11517 GO:001649	
929	978	1160 PF01566	PTHR11706, PTHR11706:SF33	K03322 GO:001602	
532	621	690 PF04398	PTHR31676, PTHR31676:SF8		
210	244	292	PTHR31681, PTHR31681:SF4		
85	102	132 PF05664	PTHR31280, PTHR31280:SF1		
491	441	461 PF00201	PTHR11926	KOG1192	GO:001675
32	40	57 PF12142, PPTHR11474,	PTHR11471. 10. 3. 1	K00422 GO:005511	
472	466	510 PF13301	PTHR34679, PTHR34679:SF2		
1860	1672	1483 PF01597	PTHR11715	KOG3373	K02437
202	221	304 PF16363	PTHR10366, PTHR10364. 2. 1. 47	K01711	
1022	1022	954 PF05757	PTHR33399, PTHR33399:SF3	K08901 GO:001989	
8	23	23 PF00544, PPTHR31683,	PTHR31684. 2. 2. 2	K01728 GO:003057	
2955	3218	3435 PF00118	PTHR11353, PTHR11353:SF8	K04077 GO:000552	
821	786	939 PF04043, PPTHR31707,	PTHR31703. 1. 1. 11	K01051 GO:000485	
750	728	726 PF01680	PTHR31829	4. 3. 3. 6	K06215 GO:004282
299	267	306 PF03168	PTHR31852, PTHR31852:SF25		
461	517	679 PF00759	PTHR22298, PTHR22293. 2. 1. 4	GO:000597	
3233	3654	3972 PF00118	PTHR11353, PTHR11353:SF11	GO:000552	
564	566	631 PF00076	PTHR24012	KOG0106, KOG0131, KOG0144	GO:000367
1445	1409	1653 PF00213	PTHR11910	KOG1662 3. 6. 3. 14	K02113 GO:004693
1662	1888	2142 PF14310, PPTHR30620,	PTHR30623. 2. 1. 55,	K15920 GO:000597	
1686	1642	2024 PF01073, PPTHR11540	1. 1. 1. 37	K00026 GO:005511	
364	432	561 PF03352	PTHR31116, PTHR31113. 2. 2. 20	K01246 GO:000872	
284	330	324 PF08031, PPTHR32448,	PTHR32441. 3. 3. 8	GO:005511	
159	160	146 PF00468	PTHR14503, PTHR14503:SF3	K02914 GO:000641	
808	870	985	PTHR11177, PTHR11177:SF167	K17525	
136	140	176 PF00657	PTHR22835, PTHR22833. 1. 1. 3	GO:001678	
1103	1025	1139 PF00085, PPTHR23293	KOG0189 1. 8. 4. 10,	K05907 GO:004545	
6259	6804	7561 PF00012	PTHR19375, PTHR19375:SF147		

1226	1128	1363 PF03629	PTHR31988, PTHR31983. 1. 1. 72		
649	557	668 PF08534	PTHR10681KOG0855 1. 11. 1. 15K03564	GO:001649	
148	158	203 PF14543	PTHR13683KOG1339 3. 4. 23. 12	GO:000650	
153	132	160 PF00396,	PPTHR12411KOG1543, K3. 4. 22. 14	GO:000823	
693	555	627 PF01789	PTHR31407, PTHR31407:SF20	GO:001989	
109	141	135 PF00403	PTHR22814KOG1603	GO:004687	
10	4	11 PF00187,	PPTHR22595KOG4742 3. 2. 1. 14 K01183	GO:000806	
29	51	63 PF14432,	PPTHR24015, PTHR24015:SF107		
350	322	417	PTHR35299, PTHR35299:SF2		
7	13	14 PF00432	PTHR11764, PTHR11765. 4. 99. 39	GO:000382	
92	121	123 PF06480,	PPTHR23076, PTHR23076:SF60	GO:001602	
2544	2259	2322 PF03767	PTHR31284, PTHR31283. 1. 3. 2	GO:000399	
308	299	351 PF00067	PTHR24286KOG0157 K09588	GO:005511	
211	180	230 PF12854,	PPTHR24015, PTHR24015:SF437		
1597	1456	1763 PF00076	PTHR24012KOG0131 K11294	GO:000367	
496	451	443 PF04752	PTHR12192KOG3182		
1156	1134	1302 PF03144,	PPTHR23115, PTHR23113. 6. 5. 3 K02358	GO:000552	
154	155	194 PF02037,	PPTHR31407, PTHR31407:SF5		
98	117	102 PF08659	PTHR24322KOG0725 1. 1. 1. 223, 1. 1. 1. 243		
162	155	142 PF00656	PTHR31810, PTHR31810:SF2	GO:000650	
29	29	53 PF00026	PTHR13683KOG1339 3. 4. 23. 12	GO:000650	
374	472	482 PF00657	PTHR22835, PTHR22833. 2. 1. 51	GO:001678	
2173	2680	2817	PTHR37209, PTHR37209:SF2		
127	126	140	PTHR14241, PTHR14241:SF18		
26	64	88 PF08263,	PPTHR27000KOG1187 2. 7. 11. 1	GO:000551	
4890	5246	4965 PF00044	PTHR10836, PTHR10831. 2. 1. 12, 1. 2. 1. 13	GO:005511	
22	22	35 PF00201	PTHR11926KOG1192 2. 4. 1. 115	GO:001675	
68	111	96	PTHR31032, PTHR31032:SF1		
35	69	75 PF00076	PTHR24012KOG0149	GO:000367	
2042	1996	2004 PF01636	PTHR34273, PTHR34272. 7. 1. 100		
1312	1269	1582 PF00076	PTHR24012KOG0131 K11294	GO:000367	
5979	6193	6116 PF00274	PTHR11627, PTHR11624. 1. 2. 13 K01623	GO:000609	
6160	6252	6714 PF00004	PTHR32429KOG0651	GO:000552	
211	157	213			
1585	1390	1713 PF13193,	PPTHR24095, PTHR24095:SF189	GO:000815	
796	667	538 PF14368	PTHR33122, PTHR33122:SF8		
1646	1551	1658 PF02915	PTHR31053, PTHR31051. 14. 13. 8K04035	GO:005511	
2182	1991	2131 PF13489,	PPTHR10108KOG1269 2. 1. 1. 103K05929	GO:000816	
90	93	98 PF08276,	PPTHR27002KOG1187 2. 7. 11. 1	GO:004854	
16	10	8 PF00685	PTHR11783KOG1584 2. 8. 2. 24	GO:000814	
217	245	274 PF02434	PTHR10811KOG2246 2. 4. 1. 222	GO:001675	
2650	2701	2764 PF03951,	PPTHR20852, PTHR20856. 3. 1. 2 K01915	GO:000680	
651	576	663 PF13326	PTHR34041, PTHR34041:SF1 K08902	GO:001020	
176	183	208 PF01789	PTHR31407, PTHR31407:SF15	GO:001989	
190	187	255 PF00657	PTHR22835, PTHR22833. 1. 1. 3	GO:001678	
1185	1250	1145 PF12847	PTHR10108KOG1270 2. 1. 1. 11 K03428		
224	214	268 PF00076	PTHR24012KOG0148	GO:000367	
830	817	797 PF07731,	PPTHR11709KOG1263 1. 10. 3. 3 K00423	GO:005511	
20050	20501	18852 PF00504	PTHR21649, PTHR21649:SF26 K08912	GO:001602	
237	199	271 PF14577,	PPTHR33232		
247	365	444 PF01190	PTHR23201, PTHR23201:SF16		
3217	3120	3103 PF00504	PTHR21649, PTHR21649:SF8 K08913	GO:001602	
652	652	594 PF08041	PTHR34951	GO:000951	
21	17	24 PF05691	PTHR31268, PTHR31262. 4. 1. 82		

11	15	18 PF00168	PTHR10024, PTHR10024:SF172	GO:000551
19	22	30 PF00875, PPTHR11455, PTHR11454. 1. 99. 13K02295		
896	864	920 PF00572	PTHR11545KOG3203	GO:000641
71	110	150 PF13802, PPTHR22762, PTHR22763. 2. 1. 20	K01187	GO:000597
561	608	664 PF00759	PTHR22298, PTHR22293. 2. 1. 4	GO:000597
369	335	325 PF00171	PTHR11699, PTHR11691. 2. 1. 5	K00128 GO:005511
242	153	208 PF00197	PTHR33107, PTHR33107:SF5	GO:000486
591	504	571 PF04752	PTHR12192KOG3182	
37	48	40 PF00301	PTHR10909	GO:000550
4423	4505	4410 PF00044, PPTHR10836KOG0657	1. 2. 1. 12, K05298	GO:005511
2849	2567	2603 PF00504	PTHR14154, PTHR14154:SF10	K03542
103	113	110 PF00230	PTHR19139KOG0223	K09872 GO:001602
15	5	15	PTHR35697, PTHR35697:SF1	
808	741	837 PF05694	PTHR23300	K17285 GO:000843
2262	2170	2237 PF00316	PTHR11556KOG1458	3. 1. 3. 37 K01100 GO:004257
8002	8134	7351 PF05757	PTHR33399, PTHR33399:SF3	K08901 GO:001989
3103	3319	3522 PF01293	PTHR30031, PTHR30034. 1. 1. 49, K01610	GO:000609
30	33	26 PF00201	PTHR11926, PTHR11926:SF298	GO:001675
491	603	566 PF06955, PPTHR31062, PTHR31062. 4. 1. 207	K08235	GO:004804
23	25	25 PF08541, PPTHR31561, PTHR31562. 3. 1. 199	K15397	GO:001674
28	41	29 PF03098	PTHR11903KOG2408	
179	137	169 PF04193	PTHR16201KOG2913	
16566	16571	14704 PF00504	PTHR21649, PTHR21649:SF26	K08912 GO:001602
17	5	8 PF13360	PTHR32303, PTHR32301. 1. 2. 6	
1240	1298	1471 PF04043, PPTHR31707, PTHR31703. 1. 1. 11	K01051	GO:000485
494	517	530 PF10674	PTHR35319, PTHR35319:SF2	
308	305	237 PF00334	PTHR11349, PTHR11342. 7. 4. 6	GO:000624
2728	2890	2966 PF00118	PTHR11353, PTHR11353:SF8	K04077 GO:000552
18	31	47 PF01477, PPTHR11771, PTHR11771. 13. 11. 1	K00454	GO:000551
12	2	4 PF02727, PPTHR10638, PTHR10631. 4. 3. 21	K00276	GO:005511
198	138	189 PF00656	PTHR31810KOG1546	GO:000650
2011	2165	2209	PTHR31250, PTHR31250:SF10	
442	406	484 PF00466	PTHR11560, PTHR11560:SF8	K02864 GO:004225
28	63	87	PTHR35480KOG0978, KOG4593	
332	321	342 PF00450	PTHR11802, PTHR11803. 4. 16. 6	K16297 GO:000650
306	269	314 PF00150	PTHR31451, PTHR31453. 2. 1. 78	K19355 GO:000597
801	1129	1318 PF03953, PPTHR11588, PTHR11582. 4. 2. 1	K07375	GO:000392
5	2	9 PF00319, PPTHR11945KOG0014		GO:004698
130	160	214 PF05199, PPTHR11552, PTHR11552:SF69	K15403	GO:005511
1857	1621	1460 PF01641	PTHR10173KOG0856	1. 8. 4. 12 K07305 GO:005511
9	21	15 PF00106	PTHR24322, PTHR24322:SF442	GO:001649
26	30	45 PF00657	PTHR22835, PTHR22833. 1. 1. 3	GO:001678
472	457	321 PF06549	PTHR31425, PTHR31425:SF3	
20509	16798	17000 PF00407	PTHR31338, PTHR31338:SF15	GO:000960
23	5	18 PF00187, PPTHR22595KOG4742	3. 2. 1. 14	K01183 GO:000806
13	10	13 PF03016	PTHR11062, PTHR11062. 4. 2. 41	
36	26	46 PF12854, PPTHR24015, PTHR24015:SF492		
1284	1668	1646 PF03330, PPTHR31867, PTHR31867:SF22		
489	455	508 PF13847, PPTHR10108, PTHR10102. 1. 1. 79		
58	60	51 PF00254	PTHR10516KOG0544	5. 2. 1. 8 GO:000645
23	13	16 PF00067	PTHR24298KOG0156	GO:005511
23	19	27 PF02458	PTHR31625, PTHR31622. 3. 1. 115	GO:001674
530	506	736 PF01740, PPTHR11814, PTHR11814:SF65	K17470	GO:001602
419	460	390	PTHR34940, PTHR34940:SF1	

312	346	331 PF00027, PPTHR10217, PTHR10217:SF476	GO:005508
58	36	55 PF00106 PTHR24320KOG1208 1. 1. 1. 330	GO:001649
58	36	51 PF11744 PTHR31086, PTHR31086:SF22	GO:001574
34	32	38 PF14416, PPTHR32285, PTHR32285:SF42	
234	250	314 PF02325 PTHR33219, PTHR33219:SF4 K02221	GO:001602
372	370	328 PF00445 PTHR11240KOG1642 3. 1. 27. 1 K01166	GO:003389
213	265	342 PF02469 PTHR32382, PTHR32382:SF4	
2534	2826	3239 PF04862 PTHR31265, PTHR31265:SF3	
1214	1168	1140 PF14159 PTHR33222, PTHR33222:SF9	
734	722	910 PF00573 PTHR10746KOG1624 K02926	GO:000641
313	350	437 PF09118, PPTHR32208, PTHR32201. 1. 3. 9	
522	617	981 PF09478, PPTHR22298, PTHR22293. 2. 1. 4	GO:003024
4510	4786	4921 PF00127 PTHR34192, PTHR34192:SF2 K02638	GO:000905
1222	1273	1418 PF01078 PTHR32039, PTHR32036. 6. 1. 1 K03405	GO:001685
32	14	20 PF00657 PTHR22835, PTHR22833. 1. 1. 3	GO:001678
384	359	439 PF05834 PTHR13789, PTHR13785. 5. 1. 18 K06444	GO:001670
162	189	186 PF10604 PTHR31907, PTHR31907:SF1	
528	480	663 PF01740, PPTHR11814, PTHR11814:SF65 K17470	GO:001602
1392	1119	1438 PF00044 PTHR10836, PTHR10831. 2. 1. 12, 1. 2. 1. 13	GO:005511
788	918	1008 PF02518, PPTHR11528, PTHR11528:SF41 K09487	GO:005108
1303	1179	1194 PF02668 PTHR10696, PTHR10696:SF21	GO:005511
7467	7625	8676 PF06955, PPTHR31062, PTHR31062. 4. 1. 207K08235	GO:004804
1088	977	1058 PF00230 PTHR19139KOG0223	GO:001602
852	831	1061 PF03460, PPTHR11493, PTHR11491. 8. 7. 1 K00392	GO:005511
18	22	9 PF00249 PTHR10641KOG0048 K09422	
708	886	947 PF14215 PTHR13902, PTHR13902:SF23	
122	58	60 PF00187, PPTHR22595KOG4742 3. 2. 1. 14	GO:000806
3987	4307	4817 PF02780, PPTHR11624, PTHR11622. 2. 1. 2, 2K00615	GO:000815
276	329	274 PF05498 PTHR33136, PTHR33136:SF7	
443	581	601 PF06955, PPTHR31062, PTHR31062. 4. 1. 207K08235	GO:004804
709	659	739 PF03059 PTHR32266, PTHR32262. 5. 1. 43 K05953	GO:003041
10	14	10 PF00646 PTHR33736, PTHR33736:SF5	GO:000551
352	398	391 PF03195 PTHR31301, PTHR31301:SF24	
1258	1142	1158 PF00504 PTHR21649, PTHR21649:SF20 K08912	GO:001602
24	46	41 PF04667 PTHR34804KOG4076	
6159	6171	6629 PF01134 PTHR10617, PTHR10611. 3. 1. 83 K10960	GO:005066
792	1012	1042 PF00282 PTHR11999, PTHR11994. 1. 1. 15 K01580	GO:003017
56	47	42 PF16113 PTHR11941KOG1684 3. 1. 2. 4 K05605	
3	7	3 PF13632 PTHR13301, PTHR13302. 4. 2. 24	
28	33	30 PF04640 PTHR31065, PTHR31065:SF14	
880	900	928 PF14845, PPTHR22600KOG2499 3. 2. 1. 52 K12373	GO:000597
2	5	10 PTHR33264, PTHR33264:SF6	
2131	2206	2857 PF00544 PTHR31683, PTHR31684. 2. 2. 2 K01728	
16	12	13 PF00582 PTHR31964, PTHR31964:SF37	GO:000695
30	33	32 PF01370 PTHR10366KOG1502 1. 3. 1. 77	GO:005066
48	39	37 PF00106 PTHR24322KOG1208 1. 3. 1. 33 K00218	GO:001649
8186	7953	9050 PF00438, PPTHR11964, PTHR11962. 5. 1. 6 K00789	GO:000655
527	554	677 PF01964 PTHR30557, PTHR30554. 1. 99. 17K03147	GO:005153
3070	2950	3113 PF03951, PPTHR20852, PTHR20856. 3. 1. 2 K01915	GO:000680
25	25	31 PF13639 PTHR14155, PTHR14155:SF78 K19041	GO:000827
24	24	32 PF00111 PTHR23426KOG3309	GO:005153
18	27	26 PTHR33597, PTHR33597:SF1	
1120	993	1398 PF04862 PTHR31265, PTHR31265:SF3	
56	26	48 PF13837 PTHR33492, PTHR33492:SF2	

3310	3181	3318 PF12338, PPTHR31262, PTHR31264. 1. 1. 39	K01602	
26	34	47		
8	19	21		
45	12	20 PF00657 PTHR22835, PTHR22833. 1. 1. 3		GO:001678
2	9	2 PF04833 PTHR31673, PTHR31673:SF3		GO:003122
4	6	20 PF12854, PPTHR24015, PTHR24015:SF496		
673	669	730 PF00141 PTHR31356, PTHR31351. 11. 1. 11	K00434	GO:005511
14	12	12		
2248	2097	2203 PF00106 PTHR24322KOG1208 1. 3. 1. 33	K00218	GO:001649
4	6	14 PF00010 PTHR11969, PTHR11969:SF22		GO:004698
13789	13445	13700 PF12338, PPTHR31262, PTHR31264. 1. 1. 39	K01602	
9	2	4 PF00403 PTHR22814KOG1603		GO:004687
16	20	20 PTHR33833, PTHR33833:SF1		
5	2	8 PF08879 PTHR34680		
19	9	14 PF00046, PPTHR24326KOG0484	K09338	GO:000367
11	13	17 PF00931 PTHR23155KOG4658		GO:004353
14	12	24 PF00657 PTHR22835, PTHR22833. 1. 1. 3		GO:001678
16	21	14 PF01764 PTHR21493KOG4569 3. 1. 1. 3		GO:000662
4	4	3 PF16113 PTHR11941KOG1684 3. 1. 2. 4		
20	19	21 PF14008, PPTHR22953KOG1378 3. 1. 3. 2		GO:001678

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AT5G25610ATRD22, RDBURP domain-containing protein
AT2G15680.1 Calcium-binding EF-hand family protein
AT3G48660.1 Protein of unknown function (DUF 3339)
AT2G39200ATML012, MSeven transmembrane MLO family protein
AT2G44160MTHFR2 methylenetetrahydrofolate reductase 2
AT3G02070.1 Cysteine proteinases superfamily protein
AT5G53900.2 Serine/threonine-protein kinase WNK (With No Lysine)-related
AT4G39720.1 VQ motif-containing protein
AT5G15900TBL19 TRICHOME BIREFRINGENCE-LIKE 19
AT1G24430.1 HXXXD-type acyl-transferase family protein
AT5G01360TBL3 Plant protein of unknown function (DUF828)
AT5G12300.1 Calcium-dependent lipid-binding (CaLB domain) family protein
AT2G30210LAC3 laccase 3
AT5G27550.1 P-loop containing nucleoside triphosphate hydrolases superfamily
AT3G24770CLE41 CLAVATA3/ESR-RELATED 41
AT4G19380.1 Long-chain fatty alcohol dehydrogenase family protein
AT1G24430.1 HXXXD-type acyl-transferase family protein
AT4G23010ATUTR2, UTUDP-galactose transporter 2
AT2G25470AtRLP21, Rreceptor like protein 21
AT4G16480ATINT4, INinositol transporter 4
AT5G17420ATCESA7, CCellulose synthase family protein
AT3G46130ATMYB48, Amyb domain protein 48
AT5G36110CYP716A1 cytochrome P450, family 716, subfamily A, polypeptide 1
AT1G20030.2 Pathogenesis-related thaumatin superfamily protein
AT3G09600.1 Homeodomain-like superfamily protein
AT1G06620.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
AT5G10860.1 Cystathionine beta-synthase (CBS) family protein
AT1G54870.1 NAD(P)-binding Rossmann-fold superfamily protein
AT1G42430.1
AT3G42725.1 Putative membrane lipoprotein
AT2G24430ANAC038, ANAC domain containing protein 38
AT5G39360EDL2 EID1-like 2
AT5G65170.1 VQ motif-containing protein
AT5G22810.1 GDLS-like Lipase/Acylhydrolase superfamily protein
AT3G08550ABI8, ELD1 elongation defective 1 protein / ELD1 protein
AT3G27027.1 Protein of unknown function (DUF 3339)
AT3G13130.1
AT3G57880.1 Calcium-dependent lipid-binding (CaLB domain) plant phosphoribo
AT2G41690AT-HSFB3, heat shock transcription factor B3
AT5G07050.1 nodulin MtN21 /EamA-like transporter family protein
AT5G23750.2 Remorin family protein
AT1G16860.1 Ubiquitin-specific protease family C19-related protein
AT2G18370.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
AT3G49290ABIL2 ABL interactor-like protein 2
AT3G26040.1 HXXXD-type acyl-transferase family protein
AT1G74520ATHVA22A, HVA22 homologue A
AT4G21380ARK3, RK3 receptor kinase 3
AT2G32150.1 Haloacid dehalogenase-like hydrolase (HAD) superfamily protein
AT1G56170ATHAP5B, Hnuclear factor Y, subunit C2
AT4G35550ATWOX13, HWUSCHEL related homeobox 13
AT5G51190.1 Integrase-type DNA-binding superfamily protein

AT4G16520ATG8F Ubiquitin-like superfamily protein
 AT2G25620AtDBP1, DBDNA-binding protein phosphatase 1
 AT1G27620.1 HXXXD-type acyl-transferase family protein
 AT3G10870ATMES17, Mmethyl esterase 17
 AT5G08350.1 GRAM domain-containing protein / ABA-responsive protein-related
 AT3G45140ATLOX2, L0lipoxygenase 2
 AT4G38690.1 PLC-like phosphodiesterases superfamily protein
 AT4G25810XTH23, XTRxyloglucan endotransglycosylase 6
 AT1G01780.1 GATA type zinc finger transcription factor family protein
 AT1G03610.1 Protein of unknown function (DUF789)
 AT1G71695.1 Peroxidase superfamily protein
 AT5G12330LRP1 Lateral root primordium (LRP) protein-related
 AT1G32910.1 HXXXD-type acyl-transferase family protein
 AT4G35020ARAC3, ATRRAC-like 3
 AT1G15740.1 Leucine-rich repeat family protein
 AT3G45160.1 Putative membrane lipoprotein
 AT4G39730.1 Lipase/lipooxygenase, PLAT/LH2 family protein
 AT2G16700ADF5, ATADactin depolymerizing factor 5
 AT1G08320bZIP21, TGbZIP transcription factor family protein
 AT3G60130BGLU16 beta glucosidase 16
 AT5G03760ATCSLA09, Nucleotide-diphospho-sugar transferases superfamily protein
 AT3G01860.1
 AT4G28600NPGR2 no pollen germination related 2
 AT3G63520ATCCD1, ATcarotenoid cleavage dioxygenase 1
 AT5G25610ATRD22, RDBURP domain-containing protein
 AT3G62950.1 Thioredoxin superfamily protein
 AT5G05790.1 Duplicated homeodomain-like superfamily protein
 AT5G07990CYP75B1, DCytochrome P450 superfamily protein
 AT5G40780LHT1 lysine histidine transporter 1
 AT5G55250IAMT1 IAA carboxylmethyltransferase 1
 AT5G47635.1 Pollen Ole e 1 allergen and extensin family protein
 AT2G27310.1 F-box family protein
 AT3G55420.1
 AT4G10550.1 Subtilase family protein
 AT4G05200CRK25 cysteine-rich RLK (RECEPTOR-like protein kinase) 25
 AT2G03200.1 Eukaryotic aspartyl protease family protein
 AT3G47420ATPS3, PS3phosphate starvation-induced gene 3
 AT3G56680.1 Single-stranded nucleic acid binding R3H protein
 AT1G59870ABCG36, ATABC-2 and Plant PDR ABC-type transporter family protein
 AT3G50410OBP1 OBF binding protein 1
 AT1G22530PATL2 PATELLIN 2
 AT1G08290WIP3 WIP domain protein 3
 AT5G59080.1
 AT1G25550.1 myb-like transcription factor family protein
 AT3G09390ATMT-1, ATmetallothionein 2A
 AT1G77400.1
 AT4G18260.1 Cytochrome b561/ferric reductase transmembrane protein family
 AT1G65520ATECI1, ECdelta(3), delta(2)-enoyl CoA isomerase 1
 AT5G17920ATCIMS, ATCobalamin-independent synthase family protein
 AT3G56880.1 VQ motif-containing protein
 AT5G67140.1 F-box/RNI-like superfamily protein
 AT1G78380ATGSTU19, glutathione S-transferase TAU 19
 AT3G09390ATMT-1, ATmetallothionein 2A
 AT4G35390AGF1 AT-hook protein of GA feedback 1

AT1G79420.1 Protein of unknown function (DUF620)
 AT5G57620AtMYB36, Myb domain protein 36
 AT1G28360ATERF12, EERF domain protein 12
 AT5G17840.1 DnaJ/Hsp40 cysteine-rich domain superfamily protein
 AT2G03480QUL2 QUASIMODO2 LIKE 2
 AT4G33450ATMYB69, Myb domain protein 69
 AT4G19670.2 RING/U-box superfamily protein
 AT2G37150.1 RING/U-box superfamily protein
 AT3G28050.1 nodulin MtN21 /EamA-like transporter family protein
 AT3G18170.1 Glycosyltransferase family 6l protein
 AT3G11760.1
 AT2G25150.1 HXXXD-type acyl-transferase family protein
 AT3G18660GUX1, PGSI plant glycogenin-like starch initiation protein 1
 AT3G59690IQD13 IQ-domain 13

 AT5G44640BGLU13 beta glucosidase 13
 AT5G04080.1
 AT1G56600AtGols2, Ggalactinol synthase 2
 AT1G32170XTH30, XTRxyloglucan endotransglucosylase/hydrolase 30
 AT5G51460ATPPA Haloacid dehalogenase-like hydrolase (HAD) superfamily protein
 AT5G25560.1 CHY-type/CTCHY-type/RING-type Zinc finger protein
 AT1G17100.1 SOUL heme-binding family protein
 AT2G36840.1 ACT-like superfamily protein
 AT1G13750.1 Purple acid phosphatases superfamily protein
 AT5G61340.1
 AT4G04900RIC10 ROP-interactive CRIB motif-containing protein 10
 AT5G37690.1 SGNH hydrolase-type esterase superfamily protein
 AT2G37040ATPAL1, PAPHE ammonia lyase 1
 AT5G15790.2 RING/U-box superfamily protein
 AT5G15790.2 RING/U-box superfamily protein
 AT5G17920ATCIMS, ATCobalamin-independent synthase family protein
 AT3G09085.1 Protein of unknown function (DUF962)
 AT2G36570.1 Leucine-rich repeat protein kinase family protein
 AT3G16230.2 Predicted eukaryotic LigT
 AT1G03700.1 Uncharacterised protein family (UPF0497)
 AT1G75390AtbZIP44, basic leucine-zipper 44
 AT5G25190.1 Integrase-type DNA-binding superfamily protein
 AT3G49490.1
 AT4G19840ATPP2-A1, phloem protein 2-A1
 AT1G13635.2 DNA glycosylase superfamily protein

 AT5G44440.1 FAD-binding Berberine family protein
 AT2G33550.1 Homeodomain-like superfamily protein
 AT5G27550.1 P-loop containing nucleoside triphosphate hydrolases superfamily
 AT3G55090.1 ABC-2 type transporter family protein
 AT4G37790HAT22 Homeobox-leucine zipper protein family
 AT4G04450AtWRKY42, WRKY family transcription factor
 AT5G41040.1 HXXXD-type acyl-transferase family protein
 AT4G24220AWI31, VEPNAD(P)-binding Rossmann-fold superfamily protein
 AT1G21000.2 PLATZ transcription factor family protein
 AT5G47070.1 Protein kinase superfamily protein
 AT3G212404CL2, AT4C4-coumarate:CoA ligase 2
 AT1G75130CYP721A1 cytochrome P450, family 721, subfamily A, polypeptide 1
 AT2G18060ANAC037, Vvascular related NAC-domain protein 1

AT3G18430.1 Calcium-binding EF-hand family protein
 AT3G54070.1 Ankyrin repeat family protein
 AT3G23690.1 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT5G23190CYP86B1 cytochrome P450, family 86, subfamily B, polypeptide 1
 AT4G03510ATRMA1,RMRING membrane-anchor 1
 AT4G25420AT2301,AT2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
 AT2G37360.1 ABC-2 type transporter family protein
 AT1G62990IXR11,KNAKNOTTED-like homeobox of Arabidopsis thaliana 7
 AT1G31280AG02 Argonaute family protein
 AT2G29130ATLAC2,LAlaccase 2
 AT5G23190CYP86B1 cytochrome P450, family 86, subfamily B, polypeptide 1
 AT1G28380NSL1 MAC/Perforin domain-containing protein
 AT1G66140ZFP4 zinc finger protein 4
 AT2G37040ATPAL1,PAPHE ammonia lyase 1
 AT3G04590.2 AT hook motif DNA-binding family protein
 AT1G17370UBP1B oligouridylate binding protein 1B
 AT2G38570.1
 AT4G33580ATBCA5,BCbeta carbonic anhydrase 5
 AT1G18330EPR1,RVE7Homeodomain-like superfamily protein
 AT2G42610LSH10 Protein of unknown function (DUF640)
 AT2G38080ATLMCO4,ILaccase/Diphenol oxidase family protein
 AT2G35940BLH1,EDA2BEL1-like homeodomain 1
 AT1G66120.1 AMP-dependent synthetase and ligase family protein
 AT4G17900.1 PLATZ transcription factor family protein
 AT1G20990.1 Cysteine/Histidine-rich C1 domain family protein
 AT1G80130.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT3G45240ATSTNAK2,Ggeminivirus rep interacting kinase 1
 AT5G42380CML37,CMLcalmodulin like 37
 AT2G26560PLA IIA,Pphospholipase A 2A
 AT4G19420.1 Pectinacetylerase family protein
 AT5G42050.1 DCD (Development and Cell Death) domain protein
 AT1G80750.1 Ribosomal protein L30/L7 family protein
 AT4G35750.1 SEC14 cytosolic factor family protein / phosphoglyceride transf

AT1G74100ATSOT16,Asulfotransferase 16
 AT2G43290MSS3 Calcium-binding EF-hand family protein
 AT4G20190.1
 AT3G17100.2 sequence-specific DNA binding transcription factors

AT4G24010ATCSLG1,Ccellulose synthase like G1
 AT2G24960.2
 AT3G22600.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT3G15580APG8H,ATGUbiquitin-like superfamily protein
 AT4G27460.1 Cystathionine beta-synthase (CBS) family protein
 AT1G27730STZ,ZAT10salt tolerance zinc finger
 AT4G22920ATNYE1,NYnon-yellowing 1
 AT2G48130.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT2G14830.1 Regulator of Vps4 activity in the MVB pathway protein
 AT1G32540LOL1 lsd one like 1
 AT4G37260ATMYB73,Mmyb domain protein 73
 AT5G41800.1 Transmembrane amino acid transporter family protein
 AT2G35150EXL1 EXORDIUM like 1
 AT1G08230ATGAT1,GATransmembrane amino acid transporter family protein
 AT1G75030ATLP-3,TLthaumatin-like protein 3

AT2G39855.2
 AT2G20500.1
 AT5G65170.1 VQ motif-containing protein
 AT4G40070.1 RING/U-box superfamily protein
 AT2G38630.1 Transducin/WD40 repeat-like superfamily protein
 AT2G46780.1 RNA-binding (RRM/RBD/RNP motifs) family protein
 AT3G18400anac058,NNAC domain containing protein 58
 AT5G23750.2 Remorin family protein

 AT1G08510FATB fatty acyl-ACP thioesterases B
 AT5G66390.1 Peroxidase superfamily protein
 AT5G43150.1
 AT5G42610.1 Protein of unknown function (DUF607)
 AT3G62020GLP10 germin-like protein 10
 AT3G01990ACR6 ACT domain repeat 6
 AT5G43420.1 RING/U-box superfamily protein
 AT5G58380CIPK10,PKSOS3-interacting protein 1
 AT4G28530anac074,NNAC domain containing protein 74
 AT3G21530.1 DNase I-like superfamily protein
 AT1G27920MAP65-8 microtubule-associated protein 65-8
 AT1G66400CML23 calmodulin like 23
 AT2G46770ANAC043,ENAC (No Apical Meristem) domain transcriptional regulator super
 AT4G16520ATG8F Ubiquitin-like superfamily protein
 AT5G03170ATFLA11,FFASCICLIN-like arabinogalactan-protein 11
 AT4G18170ATWRKY28,WRKY DNA-binding protein 28
 AT5G64440AtFAAH,FAfatty acid amide hydrolase
 AT2G01210.1 Leucine-rich repeat protein kinase family protein
 AT4G18170ATWRKY28,WRKY DNA-binding protein 28
 AT1G20550.1 O-fucosyltransferase family protein
 AT2G14960GH3.1 Auxin-responsive GH3 family protein
 AT4G35560.1 Transducin/WD40 repeat-like superfamily protein
 AT5G60020ATLAC17,Llaccase 17
 AT4G28500ANAC073,NNAC domain containing protein 73

 AT4G38620ATMYB4,MYmyb domain protein 4
 AT5G10280ATMYB64,Amyb domain protein 92
 AT4G33790CER4,FAR3Jojoba acyl CoA reductase-related male sterility protein
 AT2G38120AUX1,MAP1Transmembrane amino acid transporter family protein
 AT2G38290AMT2,AMT2ammonium transporter 2
 AT2G46660CYP78A6 cytochrome P450, family 78, subfamily A, polypeptide 6
 AT3G51895AST12,SULsulfate transporter 3;1
 AT5G09520.1 hydroxyproline-rich glycoprotein family protein
 AT1G79900ATMBAC2,BMitochondrial substrate carrier family protein
 AT3G18280.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT3G02040SRG3 senescence-related gene 3
 AT4G14465AHL20 AT-hook motif nuclear-localized protein 20
 AT1G66920.2 Protein kinase superfamily protein
 AT1G77380AAP3,ATAAamino acid permease 3
 AT5G17420ATCESA7,CCellulose synthase family protein
 AT5G58350WNK4,ZIK2with no lysine (K) kinase 4
 AT3G09390ATMT-1,ATmetallothionein 2A

 AT4G08300.1 nodulin MtN21 /EamA-like transporter family protein
 AT3G55990ESK1,TBL2Plant protein of unknown function (DUF828)

AT3G05950.1 RmlC-like cupins superfamily protein
 AT5G38710.1 Methylenetetrahydrofolate reductase family protein
 AT1G80160.1 Lactoylglutathione lyase / glyoxalase I family protein
 AT2G32090.1 Lactoylglutathione lyase / glyoxalase I family protein
 AT2G33550.1 Homeodomain-like superfamily protein
 AT4G00750.1 S-adenosyl-L-methionine-dependent methyltransferases superfamily
 AT3G16520UGT88A1 UDP-glucosyl transferase 88A1
 AT5G65070AGL69, FCLK-box region and MADS-box transcription factor family protein
 AT3G19970.1 alpha/beta-Hydrolases superfamily protein
 AT4G33565.1 RING/U-box superfamily protein
 AT3G59010PME61 pectin methylesterase 61
 AT5G11890.1
 AT1G19715.3 Mannose-binding lectin superfamily protein
 AT2G16385.1
 AT5G14090.1
 AT3G18770.1 Autophagy-related protein 13
 AT2G33360.1 Protein of unknown function (DUF3527)
 AT1G34670AtMYB93, Myb domain protein 93
 AT5G56750NDL1 N-MYC downregulated-like 1
 AT5G38280PR5K PR5-like receptor kinase
 AT5G06740.1 Concanavalin A-like lectin protein kinase family protein
 AT5G32450.1 RNA binding (RRM/RBD/RNP motifs) family protein
 AT3G05270.2 Plant protein of unknown function (DUF869)
 AT2G43060IBH1 ILI1 binding bHLH 1
 AT4G36220CYP84A1, Fferulic acid 5-hydroxylase 1
 AT5G03170ATFLA11, FFASCICLIN-like arabinogalactan-protein 11
 AT1G34670AtMYB93, Myb domain protein 93
 AT4G24340.1 Phosphorylase superfamily protein
 AT5G24090ATCHIA, CHchitinase A
 AT2G26110.1 Protein of unknown function (DUF761)
 AT2G41560ACA4 autoinhibited Ca(2+)-ATPase, isoform 4
 AT1G70420.1 Protein of unknown function (DUF1645)
 AT5G23400.1 Leucine-rich repeat (LRR) family protein
 AT5G19640.1 Major facilitator superfamily protein
 AT3G21570.1
 AT1G20460.1
 AT1G09620.1 ATP binding;leucine-tRNA ligases;aminoacyl-tRNA ligases;nucleot
 AT2G31085CLE6 CLAVATA3/ESR-RELATED 6
 AT5G67210.1 Protein of unknown function (DUF579)
 AT5G05960.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT5G11890.1
 AT1G03820.1
 AT1G66120.1 AMP-dependent synthetase and ligase family protein

 AT5G22860.1 Serine carboxypeptidase S28 family protein
 AT5G58860CYP86, CYPcytochrome P450, family 86, subfamily A, polypeptide 1
 AT1G61660.1 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT5G10180AST68, SULslufate transporter 2;1
 AT2G46130ATWRKY43, WRKY DNA-binding protein 43
 AT5G19860.1 Protein of unknown function, DUF538
 AT1G21050.1 Protein of unknown function, DUF617
 AT2G38080ATLMCO4, ILaccase/Diphenol oxidase family protein
 AT1G63020NRPD1, NRPnuclear RNA polymerase D1A
 AT1G75450ATCKX5, ATcytokinin oxidase 5

AT3G27030.1
 AT3G51130.1

 AT4G33790CER4, FAR3 Jojoba acyl CoA reductase-related male sterility protein
 AT1G14780.1 MAC/Perforin domain-containing protein
 AT2G27690CYP94C1 cytochrome P450, family 94, subfamily C, polypeptide 1
 AT3G18950.1 Transducin/WD40 repeat-like superfamily protein
 AT4G10310ATHKT1, HK high-affinity K⁺ transporter 1
 AT1G02630.1 Nucleoside transporter family protein
 AT3G12720ATMYB67, Myb domain protein 67
 AT5G06090ATGPAT7, Glycerol-3-phosphate acyltransferase 7
 AT2G05990ENR1, MOD1 NAD(P)-binding Rossmann-fold superfamily protein
 AT1G27920MAP65-8 microtubule-associated protein 65-8
 AT1G19300ATGATL1, GNucleotide-diphospho-sugar transferases superfamily protein
 AT5G43700ATAUX2-11 AUX/IAA transcriptional regulator family protein
 AT5G62350.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
 AT1G14600.1 Homeodomain-like superfamily protein
 AT3G50610.1
 AT4G28640IAA11 indole-3-acetic acid inducible 11
 AT2G26290ARSK1 root-specific kinase 1
 AT2G23760BLH4, SAW2 BEL1-like homeodomain 4
 AT1G14720ATXTH28, Xyloglucan endotransglucosylase/hydrolase 28
 AT1G22710ATSUC2, SU sucrose-proton symporter 2
 AT3G11430ATGPAT5, Glycerol-3-phosphate acyltransferase 5
 AT2G26560PLA IIA, Pphospholipase A 2A
 AT3G13890ATMYB26, Myb domain protein 26
 AT1G32450NRT1.5 nitrate transporter 1.5
 AT2G16400BLH7 BEL1-like homeodomain 7
 AT2G29150.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT3G22540.1 Protein of unknown function (DUF1677)
 AT4G12350AtMYB42, Myb domain protein 42
 AT2G25737.1 Sulfite exporter TauE/SafE family protein
 AT4G06744.1 Leucine-rich repeat (LRR) family protein

 AT1G75250ATRL6, RL6 RAD-like 6
 AT1G56600AtGols2, Ggalactinol synthase 2
 AT2G23520.1 Pyridoxal phosphate (PLP)-dependent transferases superfamily pr
 AT5G01750.2 Protein of unknown function (DUF567)
 AT1G44170ALDH3H1, Aaldehyde dehydrogenase 3H1
 AT5G43150.1
 AT4G16480ATINT4, INinositol transporter 4
 AT1G21000.2 PLATZ transcription factor family protein
 AT3G59850.1 Pectin lyase-like superfamily protein

 AT5G54160ATOMT1, OM0-methyltransferase 1
 AT5G58860CYP86, CYPcytochrome P450, family 86, subfamily A, polypeptide 1
 AT5G02140.1 Pathogenesis-related thaumatin superfamily protein
 AT2G38470ATWRKY33, WRKY DNA-binding protein 33
 AT4G32810ATCCD8, CCcarotenoid cleavage dioxygenase 8
 AT3G53980.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT4G34160CYCD3, CYCCYCLIN D3;1
 AT3G05950.1 RmlC-like cupins superfamily protein
 AT2G37130.1 Peroxidase superfamily protein
 AT5G66870ASL1, LBD3ASYMMETRIC LEAVES 2-like 1

AT5G05390LAC12 laccase 12
 AT2G37040ATPAL1, PAPHE ammonia lyase 1
 AT5G02070.1 Protein kinase family protein
 AT1G06330.1 Heavy metal transport/detoxification superfamily protein
 AT4G36220CYP84A1, Ferulic acid 5-hydroxylase 1
 AT5G18270ANAC087 Arabidopsis NAC domain containing protein 87
 AT5G16490RIC4 ROP-interactive CRIB motif-containing protein 4
 AT2G30490ATC4H, C4H cinnamate-4-hydroxylase
 AT1G12940ATNRT2.5, nitrate transporter2.5

 AT5G23750.1 Remorin family protein
 AT1G65730YSL7 YELLOW STRIPE like 7
 AT5G37690.1 SGNH hydrolase-type esterase superfamily protein
 AT5G62865.1
 AT2G28250NCRK Protein kinase superfamily protein
 AT1G44350ILL6 IAA-leucine resistant (ILR)-like gene 6
 AT2G46770ANAC043, ENAC (No Apical Meristem) domain transcriptional regulator super

 AT1G24430.1 HXXXD-type acyl-transferase family protein
 AT1G19850ARF5, IAA2 Transcriptional factor B3 family protein / auxin-responsive fac
 AT3G17510CIPK1, SnRCBL-interacting protein kinase 1
 AT2G44500.1 O-fucosyltransferase family protein
 AT5G22860.1 Serine carboxypeptidase S28 family protein
 AT2G38060PHT4;2 phosphate transporter 4;2
 AT5G13220JAS1, JAZ1 jasmonate-zim-domain protein 10
 AT3G63010ATGID1B, Galpha/beta-Hydrolases superfamily protein
 AT1G79620.1 Leucine-rich repeat protein kinase family protein
 AT3G16360AHP4 HPT phosphotransmitter 4
 AT5G44550.1 Uncharacterised protein family (UPF0497)
 AT4G02590UNE12 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT5G42180.1 Peroxidase superfamily protein
 AT2G33385arpc2b actin-related protein C2B
 AT2G40470ASL11, LBDLOB domain-containing protein 15
 AT3G15990SULTR3;4 sulfate transporter 3;4
 AT1G77760GNR1, NIA1 nitrate reductase 1
 AT5G37478.1 TPX2 (targeting protein for Xklp2) protein family
 AT1G60420.1 DC1 domain-containing protein
 AT3G30340.1 nodulin MtN21 / EamA-like transporter family protein
 AT2G15790CYP40, SQN peptidyl-prolyl cis-trans isomerase / cyclophilin-40 (CYP40) /
 AT4G35750.1 SEC14 cytosolic factor family protein / phosphoglyceride transf
 AT1G19715.3 Mannose-binding lectin superfamily protein
 AT2G18360.1 alpha/beta-Hydrolases superfamily protein
 AT5G13220JAS1, JAZ1 jasmonate-zim-domain protein 10
 AT3G25930.1 Adenine nucleotide alpha hydrolases-like superfamily protein
 AT1G25330.1 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT5G05960.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT1G33800.1 Protein of unknown function (DUF579)
 AT2G33385arpc2b actin-related protein C2B
 AT1G29000.1 Heavy metal transport/detoxification superfamily protein
 AT5G09360LAC14 laccase 14
 AT4G20970.1 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT5G67020.1
 AT4G15610.1 Uncharacterised protein family (UPF0497)
 AT3G54070.1 Ankyrin repeat family protein

AT2G38110ATGPAT6, Gglycerol-3-phosphate acyltransferase 6
 AT1G58120.1
 AT5G66390.1 Peroxidase superfamily protein
 AT3G49780ATPSK3 (Fphytosulfokine 4 precursor
 AT2G32560.1 F-box family protein
 AT1G05710.5 basic helix-loop-helix (bHLH) DNA-binding superfamily protein
 AT1G70880.1 Polyketide cyclase/dehydrase and lipid transport superfamily pr
 AT2G11890.1 adenylate cyclases
 AT1G34670AtMYB93, Mmyb domain protein 93
 AT3G18710ATPUB29, Pplant U-box 29
 AT2G30210LAC3 laccase 3
 AT5G46050ATPTR3, PTPeptide transporter 3
 AT1G60190.1 ARM repeat superfamily protein
 AT4G27450.1 Aluminium induced protein with YGL and LRDR motifs
 AT2G27430.1 ARM repeat superfamily protein
 AT5G55970.1 RING/U-box superfamily protein
 AT1G27730STZ, ZAT10salt tolerance zinc finger
 AT4G31130.1 Protein of unknown function (DUF1218)
 AT4G18780ATCESA8, Ccellulose synthase family protein
 AT1G19110.1 inter-alpha-trypsin inhibitor heavy chain-related
 AT3G03280.1
 AT4G32280IAA29 indole-3-acetic acid inducible 29
 AT1G20960emb1507 U5 small nuclear ribonucleoprotein helicase, putative
 AT2G40320TBL33 TRICHOME BIREFRINGENCE-LIKE 33
 AT2G26660ATSPX2, SPSPX domain gene 2
 AT1G09610.1 Protein of unknown function (DUF579)

 AT1G61820BGLU46 beta glucosidase 46
 AT1G68850.1 Peroxidase superfamily protein
 AT1G72220.1 RING/U-box superfamily protein
 AT5G65790ATMYB68, Mmyb domain protein 68
 AT1G08990PGSIP5 plant glycogenin-like starch initiation protein 5
 AT4G32480.1 Protein of unknown function (DUF506)
 AT4G18170ATWRKY28, WRKY DNA-binding protein 28
 AT1G08230ATGAT1, GATransmembrane amino acid transporter family protein
 AT2G23540.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G48930HCT hydroxycinnamoyl-CoA shikimate/quinic acid hydroxycinnamoyl transfe
 AT3G04530ATPPCK2, Pphosphoenolpyruvate carboxylase kinase 2
 AT1G55760.1 BTB/POZ domain-containing protein
 AT1G46768RAP2.1 related to AP2 1
 AT5G65500.1 U-box domain-containing protein kinase family protein
 AT5G02090.1
 AT5G23750.1 Remorin family protein
 AT1G75250ATRL6, RL6RAD-like 6
 AT1G17950ATMYB52, Bmyb domain protein 52
 AT1G32450NRT1.5 nitrate transporter 1.5
 AT2G48140EDA4 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT2G46770ANAC043, ENAC (No Apical Meristem) domain transcriptional regulator super
 AT1G33760.1 Integrase-type DNA-binding superfamily protein
 AT1G62710BETA-VPE, beta vacuolar processing enzyme
 AT5G20260.1 Exostosin family protein
 AT3G57540.1 Remorin family protein
 AT4G20260ATPCAP1, Pplasma-membrane associated cation-binding protein 1
 AT5G45710AT-HSFA4Cwinged-helix DNA-binding transcription factor family protein

AT3G54070.1 Ankyrin repeat family protein
 AT1G59740.1 Major facilitator superfamily protein
 AT5G50760.1 SAUR-like auxin-responsive protein family
 AT3G59690 IQD13 IQ-domain 13
 AT3G61680.1 alpha/beta-Hydrolases superfamily protein
 AT2G37430.1 C2H2 and C2HC zinc fingers superfamily protein
 AT4G24350.1 Phosphorylase superfamily protein
 AT3G11210.1 SGNH hydrolase-type esterase superfamily protein
 AT3G54070.1 Ankyrin repeat family protein
 AT1G10200 WLIM1 GATA type zinc finger transcription factor family protein
 AT3G15518.1
 AT1G75390 AtbZIP44, basic leucine-zipper 44
 AT3G17210 ATHS1, HS1 heat stable protein 1
 AT2G22540 AGL22, SVPK-box region and MADS-box transcription factor family protein
 AT4G27300.1 S-locus lectin protein kinase family protein
 AT2G30540.1 Thioredoxin superfamily protein
 AT1G53270.1 ABC-2 type transporter family protein
 AT4G21440 ATM4, ATMYMYB-like 102
 AT1G28680.1 HXXXD-type acyl-transferase family protein
 AT4G28380.1 Leucine-rich repeat (LRR) family protein
 AT1G74960 ATKAS2, FA fatty acid biosynthesis 1
 AT4G24130.1 Protein of unknown function, DUF538
 AT5G54980.1 Uncharacterised protein family (UPF0497)
 AT2G40320 TBL33 TRICHOME BIREFRINGENCE-LIKE 33
 AT5G07330.1
 AT5G19410.1 ABC-2 type transporter family protein
 AT3G23590 MED33A, RF REF4-related 1
 AT1G04220 KCS2 3-ketoacyl-CoA synthase 2
 AT5G67210.1 Protein of unknown function (DUF579)
 AT3G53720 ATCHX20, C cation/H⁺ exchanger 20
 AT3G04810 ATNEK2, NENIMA-related kinase 2
 AT3G24770 CLE41 CLAVATA3/ESR-RELATED 41
 AT1G14550.1 Peroxidase superfamily protein
 AT3G54240.1 alpha/beta-Hydrolases superfamily protein
 AT2G40260.1 Homeodomain-like superfamily protein
 AT2G30490 ATC4H, C4H cinnamate-4-hydroxylase
 AT3G18670.1 Ankyrin repeat family protein
 AT1G24620.1 EF hand calcium-binding protein family
 AT3G46130 ATMYB48, Amyb domain protein 48
 AT3G18660 GUX1, PGSI plant glycogenin-like starch initiation protein 1

 AT5G42650 AOS, CYP74 allene oxide synthase
 AT2G24430 ANAC038, ANAC domain containing protein 38
 AT1G02040.1 C2H2-type zinc finger family protein
 AT3G62730.1
 AT5G08640 ATFLS1, FL flavonol synthase 1
 AT2G05990 ENR1, MOD1 NAD(P)-binding Rossmann-fold superfamily protein
 AT4G37370 CYP81D8 cytochrome P450, family 81, subfamily D, polypeptide 8
 AT2G26660 ATSPX2, SPSX domain gene 2
 AT1G07080.1 Thioredoxin superfamily protein
 AT5G54690 GAUT12, IR galacturonosyltransferase 12
 AT5G05110.1 Cystatin/monellin family protein
 AT2G37170 PIP2;2, PI plasma membrane intrinsic protein 2
 AT1G70840 MLP31 MLP-like protein 31

AT2G42440.1 Lateral organ boundaries (LOB) domain family protein
 AT2G38120AUX1,MAP1 Transmembrane amino acid transporter family protein
 AT5G05390LAC12 laccase 12
 AT4G35160.1 O-methyltransferase family protein
 AT5G01520.1 RING/U-box superfamily protein
 AT2G46130ATWRKY43,WRKY DNA-binding protein 43
 AT2G42360.1 RING/U-box superfamily protein
 AT5G16740.1 Transmembrane amino acid transporter family protein
 AT1G03010.1 Phototropic-responsive NPH3 family protein
 AT5G41800.1 Transmembrane amino acid transporter family protein
 AT5G16770AtMYB9,MY myb domain protein 9
 AT1G65690.1 Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprot
 AT1G17950ATMYB52,Bmyb domain protein 52
 AT5G64260EXL2 EXORDIUM like 2
 AT1G732201-Oct,At0organic cation/carnitine transporter1
 AT4G05150.1 Octicosapeptide/Phox/Bemlp family protein
 AT2G20080.1
 AT1G74460.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT2G37750.1
 AT4G24140.1 alpha/beta-Hydrolases superfamily protein
 AT2G28315.1 Nucleotide/sugar transporter family protein
 AT5G14740BETA CA2, carbonic anhydrase 2
 AT2G20142.1 Toll-Interleukin-Resistance (TIR) domain family protein
 AT5G09220AAP2 amino acid permease 2
 AT1G24625ZFP7 zinc finger protein 7
 AT1G09530PAP3,PIF3 phytochrome interacting factor 3
 AT2G32800AP4.3A protein kinase family protein
 AT5G41040.1 HXXXD-type acyl-transferase family protein
 AT3G28917MIF2 mini zinc finger 2
 AT4G31540ATEX070G1exocyst subunit exo70 family protein G1
 AT2G40390.1
 AT4G35040bZIP19 Basic-leucine zipper (bZIP) transcription factor family protein
 AT5G01225.1
 AT2G38800.1 Plant calmodulin-binding protein-related
 AT2G32830PHT1;5,PHphosphate transporter 1;5
 AT5G22930.1 Protein of unknown function (DUF1635)
 AT4G12300CYP706A4 cytochrome P450, family 706, subfamily A, polypeptide 4
 AT3G18400anac058,NNAC domain containing protein 58
 AT4G32940GAMMA-VPEgamma vacuolar processing enzyme
 AT1G67260TCP1 TCP family transcription factor
 AT2G30590WRKY21 WRKY DNA-binding protein 21
 AT4G35550ATWOX13,HWUSCHEL related homeobox 13
 AT4G25810XTH23,XTRxyloglucan endotransglycosylase 6
 AT4G37770ACS8 1-amino-cyclopropane-1-carboxylate synthase 8
 AT5G61430ANAC100,ANAC domain containing protein 100
 AT1G22710ATSUC2,SU sucrose-proton symporter 2
 AT3G28960.1 Transmembrane amino acid transporter family protein
 AT4G01070GT72B1,UGUDP-Glycosyltransferase superfamily protein
 AT4G08950EXO Phosphate-responsive 1 family protein
 AT5G04930ALA1 aminophospholipid ATPase 1
 AT2G21180.1
 AT5G49350.1 Glycine-rich protein family
 AT1G68470.1 Exostosin family protein
 AT2G39690.1 Protein of unknown function, DUF547

AT2G29110ATGLR2.8, glutamate receptor 2.8
 AT3G10120.1
 AT2G03220ATFT1, ATF fucosyltransferase 1
 AT2G40370LAC5 laccase 5
 AT4G17220ATMAP70-5 microtubule-associated proteins 70-5
 AT5G53750.1 CBS domain-containing protein

 AT2G39350.1 ABC-2 type transporter family protein
 AT1G71380ATCEL3, AT cellulase 3
 AT5G44400.1 FAD-binding Berberine family protein
 AT4G27290.1 S-locus lectin protein kinase family protein
 AT5G50790.1 Nodulin MtN3 family protein
 AT3G27400.1 Pectin lyase-like superfamily protein
 AT1G05260RCI3, RCI3 Peroxidase superfamily protein
 AT4G12350AtMYB42, Mmyb domain protein 42
 AT5G62350.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
 AT5G09760.1 Plant invertase/pectin methylesterase inhibitor superfamily
 AT1G69500CYP704B1 cytochrome P450, family 704, subfamily B, polypeptide 1

 AT1G56600AtGols2, Ggalactinol synthase 2
 AT3G26320CYP71B36 cytochrome P450, family 71, subfamily B, polypeptide 36
 AT5G03760ATCSLA09, Nucleotide-diphospho-sugar transferases superfamily protein
 AT1G27730STZ, ZAT10 salt tolerance zinc finger
 AT5G10180AST68, SUL sulfate transporter 2;1
 AT3G12720ATMYB67, Amyb domain protein 67
 AT1G63910AtMYB103, myb domain protein 103
 AT5G16740.1 Transmembrane amino acid transporter family protein
 AT5G10695.1
 AT4G38560.2 Arabidopsis phospholipase-like protein (PEARLI 4) family
 AT3G22800.1 Leucine-rich repeat (LRR) family protein
 AT1G33760.1 Integrase-type DNA-binding superfamily protein
 AT2G16230.1 O-Glycosyl hydrolases family 17 protein
 AT4G21390B120 S-locus lectin protein kinase family protein
 AT4G32870.1 Polyketide cyclase/dehydrase and lipid transport superfamily pr
 AT1G07120.1
 AT3G25400.1
 AT4G33467.2
 AT4G27280.1 Calcium-binding EF-hand family protein
 AT4G03270CYCD6;1 Cyclin D6;1
 AT1G49960.1 Xanthine/uracil permease family protein
 AT3G12720ATMYB67, Amyb domain protein 67
 AT5G24870.1 RING/U-box superfamily protein
 AT5G56350.1 Pyruvate kinase family protein
 AT2G37090IRX9 Nucleotide-diphospho-sugar transferases superfamily protein
 AT3G01470ATHB-1, AT homeobox 1
 AT1G17840ABCG11, AT white-brown complex homolog protein 11
 AT3G60120BGLU27 beta glucosidase 27
 AT3G54070.1 Ankyrin repeat family protein
 AT2G21100.1 Disease resistance-responsive (dirigent-like protein) family pr
 AT2G26640KCS11 3-ketoacyl-CoA synthase 11
 AT1G50420SCL-3, SCL scarecrow-like 3

 AT1G61110anac025, NNAC domain containing protein 25

AT3G03700.1 Plasma-membrane choline transporter family protein
 AT1G70260.1 nodulin MtN21 /EamA-like transporter family protein
 AT5G58350WNK4, ZIK2with no lysine (K) kinase 4
 AT5G56340ATCRT1 RING/U-box superfamily protein
 AT2G18370.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT1G24140.1 Matrixin family protein
 AT3G02040SRG3 senescence-related gene 3
 AT2G37360.1 ABC-2 type transporter family protein
 AT2G20560.1 DNAJ heat shock family protein
 AT1G03220.1 Eukaryotic aspartyl protease family protein

 AT5G10770.1 Eukaryotic aspartyl protease family protein
 AT4G15550IAGLU indole-3-acetate beta-D-glucosyltransferase
 AT3G16520UGT88A1 UDP-glucosyl transferase 88A1
 AT1G02520PGP11 P-glycoprotein 11
 AT2G32030.1 Acyl-CoA N-acyltransferases (NAT) superfamily protein
 AT1G58190AtRLP9, RLreceptor like protein 9
 AT3G23430ATPH01, PHphosphate 1
 AT1G27170.1 transmembrane receptors;ATP binding
 AT3G23250ATMYB15, Amyb domain protein 15
 AT1G65730YSL7 YELLOW STRIPE like 7

 AT5G17230PSY PHYTOENE SYNTHASE
 AT4G27300.1 S-locus lectin protein kinase family protein
 AT3G52970CYP76G1 cytochrome P450, family 76, subfamily G, polypeptide 1

 AT3G22840ELIP, ELIPChlorophyll A-B binding family protein
 AT5G06080LBD33 LOB domain-containing protein 33
 AT1G72200.1 RING/U-box superfamily protein
 AT3G07990SCPL27 serine carboxypeptidase-like 27
 AT4G24050.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT1G22400ATUGT85A1UDP-Glycosyltransferase superfamily protein
 AT3G12060TBL1 Plant protein of unknown function (DUF828)
 AT3G28857.1 basic helix-loop-helix (bHLH) DNA-binding family protein
 AT3G27150.1 Galactose oxidase/kelch repeat superfamily protein
 AT3G21710.2
 AT1G55790.1 Domain of unknown function (DUF2431)
 AT1G55020ATLOX1, LOlipoxygenase 1
 AT3G07940.1 Calcium-dependent ARF-type GTPase activating protein family
 AT2G25625.2
 AT3G13610.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
 AT1G52190.1 Major facilitator superfamily protein
 AT5G65090BST1, DER4DNase I-like superfamily protein
 AT2G01340At17.1
 AT4G27220.1 NB-ARC domain-containing disease resistance protein
 AT3G59850.1 Pectin lyase-like superfamily protein
 AT3G16520UGT88A1 UDP-glucosyl transferase 88A1
 AT5G14650.1 Pectin lyase-like superfamily protein
 AT3G212404CL2, AT4C4-coumarate:CoA ligase 2
 AT4G35160.1 O-methyltransferase family protein
 AT1G43800.1 Plant stearoyl-acyl-carrier-protein desaturase family protein
 AT1G53270.1 ABC-2 type transporter family protein
 AT1G58602.2 LRR and NB-ARC domains-containing disease resistance protein

AT2G14520.1 CBS domain-containing protein with a domain of unknown function
AT5G08280HEMC hydroxymethylbilane synthase
AT4G21060.2 Galactosyltransferase family protein
AT1G58290HEMA1 Glutamyl-tRNA reductase family protein
AT5G24550BGLU32 beta glucosidase 32
AT1G69530AT-EXP1, Aexpansin A1
AT2G05990ENR1, MOD1NAD(P)-binding Rossmann-fold superfamily protein
AT1G52700.1 alpha/beta-Hydrolases superfamily protein
AT2G20580ATRPN1A, R26S proteasome regulatory subunit S2 1A
AT2G03090ATEXP15, Aexpansin A15
AT2G31400GUN1 genomes uncoupled 1
AT2G04280.1
AT3G29635.1 HXXXD-type acyl-transferase family protein
AT1G67740PSBY, YCF3photosystem II BY

AT1G15760.1 Sterile alpha motif (SAM) domain-containing protein
AT3G61470LHCA2 photosystem I light harvesting complex gene 2
AT3G48560AHAS, ALS, chlorsulfuron/imidazolinone resistant 1
AT5G35550ATMYB123, Duplicated homeodomain-like superfamily protein
AT3G53580.1 diaminopimelate epimerase family protein
AT3G04290ATLTL1, LTLi-tolerant lipase 1
AT3G12750ZIP1 zinc transporter 1 precursor
AT1G09690.1 Translation protein SH3-like family protein
AT3G05950.1 RmlC-like cupins superfamily protein
AT1G77280.1 Protein kinase protein with adenine nucleotide alpha hydrolases
AT5G58600PMR5, TBL4Plant protein of unknown function (DUF828)
AT4G25050ACP4 acyl carrier protein 4
AT1G78060.1 Glycosyl hydrolase family protein
AT3G27060ATTSO2, TSFerritin/ribonucleotide reductase-like family protein
AT1G80480PTAC17 plastid transcriptionally active 17
AT2G28190CSD2, CZSOcopper/zinc superoxide dismutase 2
AT1G78380ATGSTU19, glutathione S-transferase TAU 19
AT5G23570ATSGS3, SGXS domain-containing protein / XS zinc finger domain-containing
AT1G18450ARP4, ATARactin-related protein 4
AT4G19710AK-HSDH, Aaspartate kinase-homoserine dehydrogenase ii
AT3G58100PDCB5 plasmodesmata callose-binding protein 5
AT2G45420LBD18 LOB domain-containing protein 18
AT1G67740PSBY, YCF3photosystem II BY
AT5G0394054CP, CPSRchloroplast signal recognition particle 54 kDa subunit
AT4G16410.1

AT5G42930.1 alpha/beta-Hydrolases superfamily protein
AT4G39210APL3 Glucose-1-phosphate adenylyltransferase family protein
AT5G26670.1 Pectinacetylerase family protein
AT5G64040PSAN photosystem I reaction center subunit PSI-N, chloroplast, putat
AT1G71480.1 Nuclear transport factor 2 (NTF2) family protein
AT3G57270BG1 beta-1, 3-glucanase 1
AT5G02500AT-HSC70-heat shock cognate protein 70-1
AT3G63190AtcpRRF, criosome recycling factor, chloroplast precursor
AT3G14900.1
AT5G54010.1 UDP-Glycosyltransferase superfamily protein
AT2G46210.1 Fatty acid/sphingolipid desaturase
AT2G34430LHB1B1, LHlight-harvesting chlorophyll-protein complex II subunit B1
AT3G18420.1 Protein prenyltransferase superfamily protein

AT3G51860ATCAX3, ATcation exchanger 3
 AT1G52360.1 Coatomer, beta\' subunit
 AT2G48020.1 Major facilitator superfamily protein
 AT4G28250ATEXPB3, Aexpansin B3
 AT2G39730RCA rubisco activase
 AT4G23990ATCSLG3, Ccellulose synthase like G3
 AT5G03260LAC11 laccase 11
 AT4G02290AtGH9B13, glycosyl hydrolase 9B13
 AT3G27750.1
 AT5G56000AtHsp90.4HEAT SHOCK PROTEIN 81.4
 AT3G29030ATEXP5, Aexpansin A5
 AT3G46780PTAC16 plastid transcriptionally active 16
 AT4G21990APR3, ATAPAPS reductase 3
 AT5G58930.1 Protein of unknown function (DUF740)
 AT5G45160.1 Root hair defective 3 GTP-binding protein (RHD3)
 AT2G22590.1 UDP-Glycosyltransferase superfamily protein
 AT2G05990ENR1, MOD1NAD(P)-binding Rossmann-fold superfamily protein

 AT1G77000ATSKP2;2, RNI-like superfamily protein
 AT2G13360AGT, AGT1, alanine:glyoxylate aminotransferase
 AT2G30950FTSH2, VARFtsH extracellular protease family
 AT3G28920AtHB34, HBhomeobox protein 34
 AT1G78630emb1473 Ribosomal protein L13 family protein
 AT5G06300.1 Putative lysine decarboxylase family protein
 AT3G47570.1 Leucine-rich repeat protein kinase family protein
 AT1G09890.1 Rhamnogalacturonate lyase family protein
 AT5G33370.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G17020ATCRM1, Aexportin 1A
 AT1G11600CYP77B1 cytochrome P450, family 77, subfamily B, polypeptide 1
 AT1G74670.1 Gibberellin-regulated family protein
 AT3G55330PPL1 PsbP-like protein 1
 AT5G42020BIP, BIP2 Heat shock protein 70 (Hsp 70) family protein
 AT1G74160.1
 AT4G21990APR3, ATAPAPS reductase 3
 AT5G20740.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
 AT5G13700APAO, ATPApolyamine oxidase 1
 AT5G25880ATNADP-MENADP-malic enzyme 3
 AT1G15820CP24, LHCBlight harvesting complex photosystem II subunit 6
 AT3G04720HEL, PR-4, pathogenesis-related 4
 AT3G01680.1
 AT1G72640.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT2G17420ATNTRA, NTNADPH-dependent thioredoxin reductase A
 AT1G70100.3
 AT5G46050ATPTR3, PTpeptide transporter 3
 AT2G37640ATEXP3, ATBarwin-like endoglucanases superfamily protein
 AT1G30380PSAK photosystem I subunit K
 AT4G39230.1 NmrA-like negative transcriptional regulator family protein
 AT3G02090MPPBETA Insulinase (Peptidase family M16) protein
 AT1G29040.1
 AT4G38710.2 glycine-rich protein
 AT1G21600PTAC6 plastid transcriptionally active 6
 AT5G62790DXR, PDE121-deoxy-D-xylulose 5-phosphate reductoisomerase
 AT5G08610.1 P-loop containing nucleoside triphosphate hydrolases superfamil
 AT3G26380.1 Melibiase family protein

AT2G37460.1 nodulin MtN21 /EamA-like transporter family protein
 AT4G38460GGR geranylgeranyl reductase
 AT2G33847.1
 AT1G11770.1 FAD-binding Berberine family protein
 AT1G60420.1 DC1 domain-containing protein
 AT2G46170.1 Reticulon family protein
 AT2G22840AtGRF1,GR growth-regulating factor 1
 AT3G17180scpl33 serine carboxypeptidase-like 33
 AT5G07990CYP75B1,DCytochrome P450 superfamily protein
 AT5G45470.1 Protein of unknown function (DUF594)
 AT2G10940.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT1G68010ATHPR1,HP hydroxypyruvate reductase
 AT5G40950RPL27 ribosomal protein large subunit 27
 AT1G11860.3 Glycine cleavage T-protein family
 AT3G04760.1 Pentatricopeptide repeat (PPR-like) superfamily protein
 AT4G39260ATGRP8,CC cold, circadian rhythm, and RNA binding 1
 AT5G67090.1 Subtilisin-like serine endopeptidase family protein
 AT4G04640ATPC1 ATPase, F1 complex, gamma subunit protein
 AT3G13650.1 Disease resistance-responsive (dirigent-like protein) family pr
 AT5G062902-Cys Prx2-cysteine peroxiredoxin B
 AT5G07990CYP75B1,DCytochrome P450 superfamily protein
 AT3G50685.1
 AT1G29670.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT3G55440ATCTIMC,Ctriosephosphate isomerase
 AT4G37580COP3,HLS1Acyl-CoA N-acyltransferases (NAT) superfamily protein
 AT4G20940.1 Leucine-rich receptor-like protein kinase family protein
 AT5G13510.1 Ribosomal protein L10 family protein
 AT1G51110.1 Plastid-lipid associated protein PAP / fibrillin family protein
 AT4G37925NDH-M subunit NDH-M of NAD(P)H:plastoquinone dehydrogenase complex
 AT4G38380.1 MATE efflux family protein
 AT4G02510ATTOC159,translocon at the outer envelope membrane of chloroplasts 159
 AT3G22670.1 Pentatricopeptide repeat (PPR) superfamily protein
 AT4G05530IBR1,SDRA indole-3-butyric acid response 1
 AT2G06520PSBX photosystem II subunit X
 AT1G27680APL2 ADPGLC-PPase large subunit
 AT4G18030.1 S-adenosyl-L-methionine-dependent methyltransferases superfamil
 AT1G56580SVB Protein of unknown function, DUF538
 AT1G65230.1 Uncharacterized conserved protein (DUF2358)
 AT1G54690G-H2AX,GAgamma histone variant H2AX
 AT1G75270DHAR2 dehydroascorbate reductase 2
 AT4G22140EBS PHD finger family protein / bromo-adjacent homology (BAH) domai
 AT2G28790.1 Pathogenesis-related thaumatin superfamily protein
 AT1G07930.1 GTP binding Elongation factor Tu family protein
 AT1G58120.1
 AT1G79040PSBR photosystem II subunit R
 AT1G72480.1 Lung seven transmembrane receptor family protein
 AT4G34770.1 SAUR-like auxin-responsive protein family
 AT1G34575.1 FAD-binding Berberine family protein
 AT2G36530EN02,LOS2Enolase
 AT1G74470.1 Pyridine nucleotide-disulphide oxidoreductase family protein
 AT5G18660PCB2 NAD(P)-binding Rossmann-fold superfamily protein
 AT1G066800E23,OEE2photosystem II subunit P-1
 AT5G01930.1 Glycosyl hydrolase superfamily protein
 AT2G26250FDH,KCS103-ketoacyl-CoA synthase 10

AT5G48930HCT hydroxycinnamoyl-CoA shikimate/quinate hydroxycinnamoyl transfe
 AT1G18650PDCB3 plasmodesmata callose-binding protein 3
 AT2G23820.2 Metal-dependent phosphohydrolase
 AT3G22330ATRH53,PMputative mitochondrial RNA helicase 2
 AT3G20820.1 Leucine-rich repeat (LRR) family protein
 AT1G74970RPS9,TWN3ribosomal protein S9
 AT5G63810BGAL10 beta-galactosidase 10
 AT3G05600.1 alpha/beta-Hydrolases superfamily protein
 AT5G43260.1 chaperone protein dnaJ-related
 AT4G13710.1 Pectin lyase-like superfamily protein
 AT2G33800.1 Ribosomal protein S5 family protein
 AT3G25700.1 Eukaryotic aspartyl protease family protein
 AT4G37300MEE59 maternal effect embryo arrest 59
 AT5G13710CPH,SMT1 sterol methyltransferase 1
 AT3G17700ATCNGC20,cyclic nucleotide-binding transporter 1
 AT3G03620.1 MATE efflux family protein
 AT1G32990PRPL11 plastid ribosomal protein l11
 AT5G19160TBL11 TRICHOME BIREFRINGENCE-LIKE 11
 AT1G53240mMDH1 Lactate/malate dehydrogenase family protein
 AT5G51820ATPGMP,PGphosphoglucomutase
 AT3G62630.1 Protein of unknown function (DUF1645)
 AT1G066800E23,OEE2photosystem II subunit P-1
 AT1G72610ATGER1,GEgermin-like protein 1
 AT5G08060.1
 AT3G02350GAUT9 galacturonosyltransferase 9
 AT5G65220.1 Ribosomal L29 family protein
 AT2G48070RPH1 resistance to phytophthora 1
 AT1G72970EDA17,HTHGlucose-methanol-choline (GMC) oxidoreductase family protein
 AT3G19000.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
 AT5G35220EGY1 Peptidase M50 family protein
 AT4G34090.1
 AT3G03900APK3 adenosine-5\'-phosphosulfate (APS) kinase 3
 AT4G31810.1 ATP-dependent caseinolytic (Clp) protease/crotonase family prot
 AT1G29670.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT3G12780PGK1 phosphoglycerate kinase 1
 AT3G27740CARA carbamoyl phosphate synthetase A
 AT5G48850ATSDI1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT5G05170ATCESA3,ACellulose synthase family protein
 AT3G52150.2 RNA-binding (RRM/RBD/RNP motifs) family protein
 AT3G23990HSP60,HSPheat shock protein 60
 AT5G64740CESA6,E11cellulose synthase 6
 AT2G42840PDF1 protodermal factor 1
 AT2G44350ATCS,CSY4Citrate synthase family protein
 AT5G38610.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
 AT2G07050CAS1 cycloartenol synthase 1
 AT3G57490.1 Ribosomal protein S5 family protein
 AT4G36360BGAL3 beta-galactosidase 3
 AT5G45950.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G03260LAC11 laccase 11
 AT1G32550.1 2Fe-2S ferredoxin-like superfamily protein
 AT3G23990HSP60,HSPheat shock protein 60
 AT2G29630PY,THIC thiaminC
 AT4G14550IAA14,SLRindole-3-acetic acid inducible 14
 AT2G37870.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a

AT2G36870XTH32 xyloglucan endotransglucosylase/hydrolase 32
 AT3G08740.1 elongation factor P (EF-P) family protein
 AT3G54890LHCA1 photosystem I light harvesting complex gene 1
 AT1G08200AXS2 UDP-D-apiose/UDP-D-xylose synthase 2
 AT5G22740ATCSLA02, cellulose synthase-like A02
 AT2G29990NDA2 alternative NAD(P)H dehydrogenase 2
 AT4G12730FLA2 FASCICLIN-like arabinogalactan 2
 AT5G07990CYP75B1, DCytochrome P450 superfamily protein
 AT1G80560ATIMD2, IMisopropylmalate dehydrogenase 2
 AT5G20080.1 FAD/NAD(P)-binding oxidoreductase
 AT5G24660LSU2 response to low sulfur 2
 AT1G14810.1 semialdehyde dehydrogenase family protein
 AT4G30610BRS1, SCPLalpha/beta-Hydrolases superfamily protein
 AT1G30520AAE14 acyl-activating enzyme 14
 AT5G30510ARRPS1, RPribosomal protein S1
 AT3G45010scpl48 serine carboxypeptidase-like 48
 AT1G77670.1 Pyridoxal phosphate (PLP)-dependent transferases superfamily pr
 AT5G52010.1 C2H2-like zinc finger protein
 AT5G52580.2 RabGAP/TBC domain-containing protein
 AT4G01150.1
 AT2G26560PLA IIA, Pphospholipase A 2A
 AT3G01660.1 S-adenosyl-L-methionine-dependent methyltransferases superfamil
 AT3G16810APUM24, PUpumilio 24
 AT3G58610.3 ketol-acid reductoisomerase
 AT3G21250ATMRP6, MRmultidrug resistance-associated protein 6
 AT1G59820ALA3 aminophospholipid ATPase 3
 AT3G04790.1 Ribose 5-phosphate isomerase, type A protein
 AT3G54050HCEF1 high cyclic electron flow 1
 AT5G51750ATSBT1.3, subtilase 1.3
 AT5G46280MCM3 Minichromosome maintenance (MCM2/3/5) family protein
 AT1G48100.1 Pectin lyase-like superfamily protein
 AT2G40550ETG1 E2F target gene 1
 AT1G03130PSAD-2 photosystem I subunit D-2
 AT1G09640.1 Translation elongation factor EF1B, gamma chain
 AT5G49360ATBXL1, BXbeta-xylosidase 1
 AT1G09390.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G19730.1 Pectin lyase-like superfamily protein
 AT2G16050.1 Cysteine/Histidine-rich C1 domain family protein
 AT4G17740.1 Peptidase S41 family protein
 AT3G21690.1 MATE efflux family protein
 AT1G75240AtHB33, HBhomeobox protein 33
 AT4G25130PMSR4 peptide met sulfoxide reductase 4
 AT4G29400.1 Protein of unknown function (DUF3531)
 AT1G02205CER1 Fatty acid hydroxylase superfamily
 AT1G54730.2 Major facilitator superfamily protein
 AT3G58120ATBZIP61, Basic-leucine zipper (bZIP) transcription factor family protein
 AT5G13120ATCYP20-2cyclophilin 20-2
 AT4G01310.1 Ribosomal L5P family protein
 AT5G15150ATHB-3, AThomeobox 3
 AT5G26230.1
 AT1G26355SP1L1 SPIRAL1-likel
 AT5G37600ATGLN1;1, glutamine synthase clone R1
 AT1G07930.1 GTP binding Elongation factor Tu family protein
 AT3G06880.2 Transducin/WD40 repeat-like superfamily protein

AT3G54890LHCA1 photosystem I light harvesting complex gene 1
 AT3G20000TOM40 translocase of the outer mitochondrial membrane 40
 AT2G38820.2 Protein of unknown function (DUF506)
 AT3G07770AtHsp90-6HEAT SHOCK PROTEIN 89.1
 AT2G06925ATSPLA2-APhospholipase A2 family protein
 AT3G19000.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
 AT1G35510.1 O-fucosyltransferase family protein
 AT1G03600PSB27 photosystem II family protein
 AT1G43710emb1075 Pyridoxal phosphate (PLP)-dependent transferases superfamily pr
 AT1G30820.1 CTP synthase family protein
 AT1G43790TED6 tracheary element differentiation-related 6
 AT1G60950ATFD2, FED2Fe-2S ferredoxin-like superfamily protein
 AT1G47840HXK3 hexokinase 3
 AT1G31920.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT1G23460.1 Pectin lyase-like superfamily protein
 AT2G24280.1 alpha/beta-Hydrolases superfamily protein
 AT4G35640ATSERAT3; serine acetyltransferase 3;2
 AT4G29060emb2726 elongation factor Ts family protein
 AT5G67090.1 Subtilisin-like serine endopeptidase family protein
 AT1G42970GAPB glyceraldehyde-3-phosphate dehydrogenase B subunit
 AT3G47800.1 Galactose mutarotase-like superfamily protein
 AT5G52520OVA6, PRORClass II aaRS and biotin synthetases superfamily protein
 AT2G04030AtHsp90.5Chaperone protein htpG family protein
 AT5G15490.1 UDP-glucose 6-dehydrogenase family protein
 AT1G05190emb2394 Ribosomal protein L6 family
 AT4G24770ATRBP31, A31-kDa RNA binding protein
 AT1G61870PPR336 pentatricopeptide repeat 336
 AT5G14460.1 Pseudouridine synthase family protein
 AT1G55690.1 Sec14p-like phosphatidylinositol transfer family protein
 AT1G80760NIP6, NIP6NOD26-like intrinsic protein 6;1
 AT3G47470CAB4, LHCAlight-harvesting chlorophyll-protein complex I subunit A4
 AT4G18740.1 Rho termination factor
 AT4G35160.1 O-methyltransferase family protein
 AT3G03130.1
 AT4G33760.1 tRNA synthetase class II (D, K and N) family protein
 AT5G55630ATKC01, ATOutward rectifying potassium channel protein
 AT1G04770.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT4G24430.1 Rhamnogalacturonate lyase family protein
 AT1G65910anac028, NNAC domain containing protein 28
 AT4G14890.1 2Fe-2S ferredoxin-like superfamily protein
 AT2G44480BGLU17 beta glucosidase 17
 AT1G54780TLP18.3 thylakoid lumen 18.3 kDa protein
 AT1G15290.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT4G20360ATRAB8D, ARAB GTPase homolog E1B
 AT5G04660CYP77A4 cytochrome P450, family 77, subfamily A, polypeptide 4
 AT3G63140CSP41A chloroplast stem-loop binding protein of 41 kDa
 AT2G05070LHCB2, LHCphotosystem II light harvesting complex gene 2.2
 AT1G14890.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
 AT1G31330PSAF photosystem I subunit F
 AT4G24220AWI31, VEPNAD(P)-binding Rossmann-fold superfamily protein
 AT3G20820.1 Leucine-rich repeat (LRR) family protein
 AT5G54270LHCB3, LHClight-harvesting chlorophyll B-binding protein 3
 AT1G60060.1 Serine/threonine-protein kinase WNK (With No Lysine)-related

AT1G05310.1 Pectin lyase-like superfamily protein
AT1G64660ATMGL, MGL methionine gamma-lyase

AT5G20630ATGER3, GER germin 3
AT3G57560NAGK N-acetyl-l-glutamate kinase
AT5G48960.1 HAD-superfamily hydrolase, subfamily IG, 5'-nucleotidase
AT5G12470.1 Protein of unknown function (DUF3411)
AT3G19000.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
AT4G37930SHM1, SHMT serine transhydroxymethyltransferase 1
AT4G32890GATA9 GATA transcription factor 9
AT5G05580FAD8 fatty acid desaturase 8
AT1G50450.1 Saccharopine dehydrogenase
AT1G19580GAMMA CA1 gamma carbonic anhydrase 1
AT1G35680.1 Ribosomal protein L21
AT4G25250.1 Plant invertase/pectin methylesterase inhibitor superfamily pro
AT1G79850CS17, PRPS ribosomal protein S17
AT2G15000.2
AT2G39770CYT1, EMB1 Glucose-1-phosphate adenylyltransferase family protein
AT4G27070TSB2 tryptophan synthase beta-subunit 2
AT5G23860TUB8 tubulin beta 8
AT5G23940DCR, EMB30 HXXXD-type acyl-transferase family protein

AT3G54690.1 Sugar isomerase (SIS) family protein
AT1G70370PG2 polygalacturonase 2
AT1G06950ATTIC110, translocon at the inner envelope membrane of chloroplasts 110
AT3G08940LHCB4.2 light harvesting complex photosystem II
AT5G13090.1
AT4G29020.2 glycine-rich protein
AT3G52140.2 tetratricopeptide repeat (TPR)-containing protein
AT4G24750.1 Rhodanese/Cell cycle control phosphatase superfamily protein
AT5G54600.1 Translation protein SH3-like family protein
AT1G74970RPS9, TWN3 ribosomal protein S9
AT1G10070ATBCAT-2, branched-chain amino acid transaminase 2
AT2G42320.2 nucleolar protein gar2-related
AT5G10250DOT3 Phototropic-responsive NPH3 family protein
AT1G64660ATMGL, MGL methionine gamma-lyase
AT3G07670.1 Rubisco methyltransferase family protein
AT5G14060CARAB-AK-Aspartate kinase family protein
AT4G31990AAT3, ASP5 aspartate aminotransferase 5
AT1G55670PSAG photosystem I subunit G
AT4G38970FBA2 fructose-bisphosphate aldolase 2
AT2G43750ACS1, ATCSO-acetylserine (thiol) lyase B
AT5G22430.1 Pollen Ole e 1 allergen and extensin family protein
AT5G11720.1 Glycosyl hydrolases family 31 protein
AT2G04160AIR3 Subtilisin-like serine endopeptidase family protein
AT5G51100FSD2 Fe superoxide dismutase 2
AT2G27920SCPL51 serine carboxypeptidase-like 51
AT5G16030.1
AT1G48350.1 Ribosomal L18p/L5e family protein
AT5G59845.1 Gibberellin-regulated family protein
AT4G31990AAT3, ASP5 aspartate aminotransferase 5
AT1G74710ATICS1, EDADC synthase superfamily protein
AT5G07020.1 proline-rich family protein

AT2G43030.1 Ribosomal protein L3 family protein
 AT4G27070TSB2 tryptophan synthase beta-subunit 2
 AT3G52500.1 Eukaryotic aspartyl protease family protein
 AT2G22600.1 RNA-binding KH domain-containing protein
 AT2G36250ATFTSZ2-1 Tubulin/FtsZ family protein
 AT5G18170GDH1 glutamate dehydrogenase 1
 AT5G44000.1 Glutathione S-transferase family protein
 AT5G60020ATLAC17, L laccase 17
 AT1G70310SPDS2 spermidine synthase 2
 AT2G40490HEME2 Uroporphyrinogen decarboxylase
 AT1G48600AtPMEAMT, S-adenosyl-L-methionine-dependent methyltransferases superfamil
 AT5G61640ATMSRA1, P peptidomethionine sulfoxide reductase 1
 AT4G24190AtHsp90-7 Chaperone protein htpG family protein
 AT1G74310ATHSP101, heat shock protein 101
 AT4G22720.1 Actin-like ATPase superfamily protein
 AT3G10060.1 FKBP-like peptidyl-prolyl cis-trans isomerase family protein
 AT5G02160.1
 AT1G09560GLP5 germin-like protein 5
 AT1G14360ATUTR3, U UDP-galactose transporter 3
 AT1G08380PSAO photosystem I subunit 0
 AT3G25140GAUT8, QUA Nucleotide-diphospho-sugar transferases superfamily protein
 AT3G46780PTAC16 plastid transcriptionally active 16
 AT1G76100PETE1 plastocyanin 1
 AT5G08540.1
 AT4G02530.1 chloroplast thylakoid lumen protein
 AT1G19190.1 alpha/beta-Hydrolases superfamily protein
 AT1G15140.1 FAD/NAD(P)-binding oxidoreductase
 AT4G11650ATOSM34, O osmotin 34
 AT4G33110.2 S-adenosyl-L-methionine-dependent methyltransferases superfamil
 AT1G64510.1 Translation elongation factor EF1B/ribosomal protein S6 family
 AT5G07990CYP75B1, D Cytochrome P450 superfamily protein
 AT4G38770ATPRP4, PR proline-rich protein 4
 AT4G00430PIP1;4, PI plasma membrane intrinsic protein 1;4
 AT2G42840PDF1 protodermal factor 1
 AT5G42765.1
 AT3G11560.4 LETM1-like protein
 AT3G26060ATPRX Q Thioredoxin superfamily protein
 AT4G13340.1 Leucine-rich repeat (LRR) family protein
 AT5G43060.1 Granulin repeat cysteine protease family protein
 AT4G27290.1 S-locus lectin protein kinase family protein
 AT1G06690.1 NAD(P)-linked oxidoreductase superfamily protein
 AT2G02880.1 mucin-related
 AT2G26340.1
 AT2G26580YAB5 plant-specific transcription factor YABBY family protein
 AT3G44540FAR4 fatty acid reductase 4
 AT4G01050TROL thylakoid rhodanese-like
 AT4G25960PGP2 P-glycoprotein 2
 AT2G38185.1 RING/U-box superfamily protein
 AT3G25920RPL15 ribosomal protein L15
 AT1G22630.1
 AT1G08550AVDE1, NPQ non-photochemical quenching 1
 AT1G80600WIN1 HOPW1-1-interacting 1
 AT5G20710BGAL7 beta-galactosidase 7
 AT3G12780PGK1 phosphoglycerate kinase 1

AT2G04570.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT3G54950PLA IIIA, patatin-like protein 6
 AT1G04770.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT5G66190ATLFR1, Ferredoxin-NADP(+)-oxidoreductase 1
 AT4G34200EDA9 D-3-phosphoglycerate dehydrogenase
 AT5G25880ATNADP-MENADP-malic enzyme 3
 AT5G39570.1
 AT3G51160GMD2, MUR1NAD(P)-binding Rossmann-fold superfamily protein
 AT5G54270LHCB3, LHC light-harvesting chlorophyll B-binding protein 3
 AT5G09970CYP78A7 cytochrome P450, family 78, subfamily A, polypeptide 7
 AT5G60020ATLAC17, Laccase 17
 AT4G01800AGY1, AtcpAlbino or Glassy Yellow 1
 AT5G01930.1 Glycosyl hydrolase superfamily protein
 AT2G36830GAMMA-TIP gamma tonoplast intrinsic protein
 AT1G55320AAE18 acyl-activating enzyme 18
 AT3G27830RPL12, RPL ribosomal protein L12-A
 AT4G13870ATWEX, ATWerner syndrome-like exonuclease
 AT5G42150.1 Glutathione S-transferase family protein
 AT3G54210.1 Ribosomal protein L17 family protein
 AT5G23120HCF136 photosystem II stability/assembly factor, chloroplast (HCF136)
 AT1G03630POR C, POR protochlorophyllide oxidoreductase C
 AT3G07620.1 Exostosin family protein
 AT4G01150.1
 AT4G23990ATCSLG3, Ccellulose synthase like G3
 AT5G38420.1 Ribulose biphosphate carboxylase (small chain) family protein
 AT2G13560NAD-ME1 NAD-dependent malic enzyme 1
 AT3G56910PSRP5 plastid-specific 50S ribosomal protein 5
 AT5G63310ATNDPK2, Nnucleoside diphosphate kinase 2
 AT4G00230XSP1 xylem serine peptidase 1
 AT3G08510ATPLC2, PLphospholipase C 2
 AT3G22890APS1 ATP sulfurylase 1
 AT1G60550DHNS, ECHIenoyl-CoA hydratase/isomerase D
 AT4G36420.1 Ribosomal protein L12 family protein
 AT1G63680ATMURE, MUacid-amino acid ligases; ligases; ATP binding; ATP binding; ligases
 AT2G16440MCM4 Minichromosome maintenance (MCM2/3/5) family protein
 AT1G76160sks5 SKU5 similar 5
 AT4G19410.1 Pectinacetylerase family protein
 AT5G13980.1 Glycosyl hydrolase family 38 protein
 AT3G48550.1
 AT1G56110NOP56 homolog of nucleolar protein NOP56
 AT1G21500.1
 AT5G25610ATRD22, RDBURP domain-containing protein
 AT5G02790GSTL3 Glutathione S-transferase family protein

 AT1G79040PSBR photosystem II subunit R
 AT2G42610LSH10 Protein of unknown function (DUF640)
 AT5G57190PSD2 phosphatidylserine decarboxylase 2
 AT5G44680.1 DNA glycosylase superfamily protein
 AT1G64680.1
 AT3G49940LBD38 LOB domain-containing protein 38
 AT1G18730NDF6 NDH dependent flow 6
 AT3G61490.3 Pectin lyase-like superfamily protein
 AT3G48730GSA2 glutamate-1-semialdehyde 2, 1-aminomutase 2
 AT3G19820CBB1, DIM, cell elongation protein / DWARF1 / DIMINUTO (DIM)

AT3G45140ATLOX2, L1 lipoxygenase 2
 AT2G24270ALDH11A3 aldehyde dehydrogenase 11A3
 AT4G35350XCP1 xylem cysteine peptidase 1
 AT3G15520.1 Cyclophilin-like peptidyl-prolyl cis-trans isomerase family pro
 AT1G60420.1 DC1 domain-containing protein
 AT5G397400LI7, RPL5 ribosomal protein L5 B
 AT4G34530CIB1 cryptochrome-interacting basic-helix-loop-helix 1
 AT4G24220AWI31, VEPNAD(P)-binding Rossmann-fold superfamily protein
 AT5G08370AGAL2, AtA alpha-galactosidase 2
 AT5G17540.1 HXXXD-type acyl-transferase family protein
 AT3G01480ATCYP38, C cyclophilin 38
 AT5G10610CYP81K1 cytochrome P450, family 81, subfamily K, polypeptide 1
 AT1G32990PRPL11 plastid ribosomal protein 111
 AT1G11600CYP77B1 cytochrome P450, family 77, subfamily B, polypeptide 1
 AT5G44680.1 DNA glycosylase superfamily protein
 AT4G22010sks4 SKU5 similar 4
 AT1G20010TUB5 tubulin beta-5 chain
 AT4G00570NAD-ME2 NAD-dependent malic enzyme 2
 AT3G04880DRT102 DNA-damage-repair/toleration protein (DRT102)
 AT2G06520PSBX photosystem II subunit X
 AT2G26330ER, QRP1 Leucine-rich receptor-like protein kinase family protein
 AT5G48920TED7 tracheary element differentiation-related 7
 AT4G36380ROT3 Cytochrome P450 superfamily protein
 AT2G44920.2 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT5G07990CYP75B1, D Cytochrome P450 superfamily protein
 AT3G14420.2 Aldolase-type TIM barrel family protein
 AT1G15960ATNRAMP6, NRAMP metal ion transporter 6
 AT3G07470.1 Protein of unknown function, DUF538
 AT2G29660.1 zinc finger (C2H2 type) family protein
 AT2G33420.1 Protein of unknown function (DUF810)
 AT2G29730UGT71D1 UDP-glucosyl transferase 71D1
 .4, GO:0004097, GO:0016491, GO:0008152
 AT3G61870.1
 AT1G32470.1 Single hybrid motif superfamily protein
 AT3G51160GMD2, MUR1 NAD(P)-binding Rossmann-fold superfamily protein
 AT4G05180PSBQ, PSBQ photosystem II subunit Q-2
 AT5G15110.1 Pectate lyase family protein
 AT3G13470.1 TCP-1/cpn60 chaperonin family protein
 AT3G14310ATPME3, PM pectin methylesterase 3
 AT5G01410ATPDX1, ATA Aldolase-type TIM barrel family protein
 AT1G45688.1
 AT2G32990AtGH9B8, G glycosyl hydrolase 9B8
 AT2G28000CH-CPN60A chaperonin-60alpha
 AT1G60000.1 RNA-binding (RRM/RBD/RNP motifs) family protein
 AT4G09650ATPD ATP synthase delta-subunit gene
 AT5G64570ATBXL4, XY beta-D-xylosidase 4
 AT1G53240mMDH1 Lactate/malate dehydrogenase family protein
 AT5G44680.1 DNA glycosylase superfamily protein
 AT1G30700.1 FAD-binding Berberine family protein
 AT1G29070.1 Ribosomal protein L34
 AT4G01050TROL thylakoid rhodanese-like
 AT3G16370.1 GDLS-like Lipase/Acylhydrolase superfamily protein
 AT4G21990APR3, ATAPAPS reductase 3
 AT5G49910cpHsc70-2 chloroplast heat shock protein 70-2

AT4G34215.1 Domain of unknown function (DUF303)
 AT3G26060ATPRX Q Thioredoxin superfamily protein
 AT3G52500.1 Eukaryotic aspartyl protease family protein
 AT1G09850XBPC3 xylem bark cysteine peptidase 3
 AT3G63540.1 Mog1/PsbP/DUF1795-like photosystem II reaction center PsbP fami
 AT1G23000.1 Heavy metal transport/detoxification superfamily protein
 AT3G54420ATCHITIV, homolog of carrot EP3-3 chitinase
 AT4G01030.1 pentatricopeptide (PPR) repeat-containing protein
 AT3G04550.1
 AT1G78955CAMS1 camelliol C synthase 1
 AT2G30950FTSH2, VARFtsH extracellular protease family
 AT4G25150.1 HAD superfamily, subfamily IIIB acid phosphatase
 AT5G05690CBB3, CPD, Cytochrome P450 superfamily protein
 AT4G16390.1 pentatricopeptide (PPR) repeat-containing protein
 AT4G24770ATRBP31, A31-kDa RNA binding protein
 AT4G31290.1 ChaC-like family protein
 AT4G20360ATRAB8D, ARAB GTPase homolog E1B
 AT3G04260PTAC3 plastid transcriptionally active 3
 AT2G47140.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT5G04200AtMC9, MC9metacaspase 9
 AT5G02190ATASP38, Eukaryotic aspartyl protease family protein
 AT3G26430.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT2G23130AGP17, ATArababinogalactan protein 17
 AT4G13030.1 P-loop containing nucleoside triphosphate hydrolases superfamil
 AT1G08590.1 Leucine-rich receptor-like protein kinase family protein
 AT3G26650GAPA, GAPAglyceraldehyde 3-phosphate dehydrogenase A subunit
 AT2G18570.1 UDP-Glycosyltransferase superfamily protein
 AT4G22890PGR5-LIKE PGR5-LIKE A
 AT3G54770.1 RNA-binding (RRM/RBD/RNP motifs) family protein
 AT1G49820ATMTK, MTKS-methyl-5-thioribose kinase
 AT2G37220.1 RNA-binding (RRM/RBD/RNP motifs) family protein
 AT4G38970FBA2 fructose-bisphosphate aldolase 2
 AT2G39730RCA rubisco activase
 AT5G21430.1 Chaperone DnaJ-domain superfamily protein
 AT1G65880BZ01 benzoyloxyglucosinolate 1
 AT2G37870.1 Bifunctional inhibitor/lipid-transfer protein/seed storage 2S a
 AT3G56940ACSF, CHL2dicarboxylate diiron protein, putative (Crd1)
 AT1G48600AtPMEAMT, S-adenosyl-L-methionine-dependent methyltransferases superfamil
 AT4G21390B120 S-locus lectin protein kinase family protein
 AT1G18590ATSOT17, A sulfotransferase 17
 AT5G41460.1 Protein of unknown function (DUF604)
 AT5G35630ATGSL1, GLglutamine synthetase 2
 AT1G03600PSB27 photosystem II family protein
 AT4G15510.1 Photosystem II reaction center PsbP family protein
 AT5G45670.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT4G25080CHLM magnesium-protoporphyrin IX methyltransferase
 AT1G47490ATRBP47C, RNA-binding protein 47C
 AT5G21105.1 Plant L-ascorbate oxidase
 AT2G34430LHB1B1, LHlight-harvesting chlorophyll-protein complex II subunit B1
 AT3G01680.1
 AT4G38770ATPRP4, PRproline-rich protein 4
 AT2G05100LHCB2, LHCphotosystem II light harvesting complex gene 2.1
 AT2G26500.2 cytochrome b6f complex subunit (petM), putative
 AT3G57520AtSIP2, SIseed imbibition 2

AT3G03680.1 C2 calcium/lipid-binding plant phosphoribosyltransferase family
 AT3G15620UVR3 DNA photolyase family protein
 AT1G78630emb1473 Ribosomal protein L13 family protein
 AT5G11720.1 Glycosyl hydrolases family 31 protein
 AT1G19940AtGH9B5, Gglycosyl hydrolase 9B5
 AT4G36250ALDH3F1 aldehyde dehydrogenase 3F1
 AT1G17860.1 Kunitz family trypsin and protease inhibitor protein
 AT4G31290.1 ChaC-like family protein
 AT1G54500.1 Rubredoxin-like superfamily protein
 AT3G26650GAPA, GAPAglyceraldehyde 3-phosphate dehydrogenase A subunit
 AT1G44575NPQ4, PSBSChlorophyll A-B binding family protein
 AT2G16850PIP2;8, PIplasma membrane intrinsic protein 2;8
 AT5G48920TED7 tracheary element differentiation-related 7
 AT4G14030SBP1 selenium-binding protein 1
 AT3G55800SBPASE sedoheptulose-bisphosphatase
 AT4G05180PSBQ, PSBQphotosystem II subunit Q-2
 AT4G37870PCK1, PEPCphosphoenolpyruvate carboxykinase 1
 AT5G12890.1 UDP-Glycosyltransferase superfamily protein
 AT2G36870XTH32 xyloglucan endotransglucosylase/hydrolase 32
 AT1G71160KCS7 3-ketoacyl-CoA synthase 7
 AT1G73680ALPHA DOXalpha dioxygenase
 AT4G36850.1 PQ-loop repeat family protein / transmembrane family protein
 AT2G34430LHB1B1, LHlight-harvesting chlorophyll-protein complex II subunit B1

 AT3G14310ATPME3, PMpectin methylesterase 3
 AT5G58250.1
 AT4G23900.1 Nucleoside diphosphate kinase family protein
 AT3G13470.1 TCP-1/cpn60 chaperonin family protein
 AT3G45140ATLOX2, LOlipoxygenase 2
 AT1G31690.1 Copper amine oxidase family protein
 AT5G04200AtMC9, MC9metacaspase 9
 AT3G52870.1 IQ calmodulin-binding motif family protein
 AT5G13510.1 Ribosomal protein L10 family protein
 AT2G34780EMB1611, Mmaternal effect embryo arrest 22
 AT3G02110scpl25 serine carboxypeptidase-like 25
 AT5G66460.1 Glycosyl hydrolase superfamily protein
 AT5G12250TUB6 beta-6 tubulin
 AT1G24260AGL9, SEP3K-box region and MADS-box transcription factor family protein
 AT1G72970EDA17, HTHGlucose-methanol-choline (GMC) oxidoreductase family protein
 AT4G04830ATMSRB5, Mmethionine sulfoxide reductase B5
 AT1G01800.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT5G33370.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT1G74730.1 Protein of unknown function (DUF1118)
 AT1G14930.1 Polyketide cyclase/dehydrase and lipid transport superfamily protein
 AT3G54420ATCHITIV, homolog of carrot EP3-3 chitinase
 AT5G03795.1 Exostosin family protein
 AT5G66520.1 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT2G40610ATEXP8, ATexpansin A8
 AT3G23510.1 Cyclopropane-fatty-acyl-phospholipid synthase
 AT2G43560.1 FKBP-like peptidyl-prolyl cis-trans isomerase family protein
 AT5G06900CYP93D1 cytochrome P450, family 93, subfamily D, polypeptide 1
 AT5G39080.1 HXXXD-type acyl-transferase family protein
 AT1G22150SULTR1;3 sulfate transporter 1;3
 AT1G51400.1 Photosystem II 5 kD protein

AT5G54250ATCNGC4, Ccyclic nucleotide-gated cation channel 4
 AT5G02540.1 NAD(P)-binding Rossmann-fold superfamily protein
 AT1G08440.1 Aluminium activated malate transporter family protein
 AT1G29050TBL38 TRICHOME BIREFRINGENCE-LIKE 38
 AT5G21920ATYLMG2, YGGT family protein
 AT1G26820RNS3 ribonuclease 3
 AT5G55730FLA1 FASCICLIN-like arabinogalactan 1
 AT5G11420.1 Protein of unknown function, DUF642
 AT2G46820PSAP, PSI-photosystem I P subunit
 AT1G07320RPL4 ribosomal protein L4
 AT1G14430.1 glyoxal oxidase-related protein
 AT1G64390AtGH9C2, Gglycosyl hydrolase 9C2
 AT1G76100PETE1 plastocyanin 1
 AT5G45930CHL I2, CHmagnesium chelatase i2
 AT1G29670.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G57030LUT2 Lycopene beta/epsilon cyclase protein
 AT1G24020MLP423 MLP-like protein 423
 AT1G22150SULTR1;3 sulfate transporter 1;3
 AT1G12900GAPA-2 glyceraldehyde 3-phosphate dehydrogenase A subunit 2
 AT2G04030AtHsp90.5Chaperone protein htpG family protein
 AT3G21360.1 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily
 AT5G13870EXGT-A4, Xxyloglucan endotransglucosylase/hydrolase 5
 AT3G61430ATPIP1, PIplasma membrane intrinsic protein 1A
 AT5G04590SIR sulfite reductase
 AT3G01140AtMYB106, myb domain protein 106
 AT1G60060.1 Serine/threonine-protein kinase WNK (With No Lysine)-related
 AT3G54420ATCHITIV, homolog of carrot EP3-3 chitinase
 AT2G45290.1 Transketolase
 AT5G67070RALFL34 ralf-like 34
 AT1G11545XTH8 xyloglucan endotransglucosylase/hydrolase 8
 AT1G09240ATNAS3, NAnicotianamine synthase 3
 AT2G36090.1 F-box family protein
 AT3G11090LBD21 LOB domain-containing protein 21
 AT2G34430LHB1B1, LHlight-harvesting chlorophyll-protein complex II subunit B1
 AT4G16146.1 cAMP-regulated phosphoprotein 19-related protein
 AT1G74470.1 Pyridine nucleotide-disulphide oxidoreductase family protein
 AT5G17330GAD, GAD1 glutamate decarboxylase
 AT5G65940CHY1 beta-hydroxyisobutyryl-CoA hydrolase 1
 AT2G33100ATCSLD1, Ccellulose synthase-like D1
 AT1G31040.1 PLATZ transcription factor family protein
 AT1G65590ATHEX1, HEbeta-hexosaminidase 3
 AT5G14690.1
 AT1G67750.1 Pectate lyase family protein
 AT1G44760.1 Adenine nucleotide alpha hydrolases-like superfamily protein
 AT5G42800DFR, M318, dihydroflavonol 4-reductase
 AT5G54190PORA protochlorophyllide oxidoreductase A
 AT1G02500AtSAM1, MAS-adenosylmethionine synthetase 1
 AT2G29630PY, THIC thiaminC
 AT5G37600ATGLN1;1, glutamine synthase clone R1
 AT5G05810ATL43 RING/U-box superfamily protein
 AT3G16250NDF4 NDH-dependent cyclic electron flow 1
 AT1G58122CPuORF45 conserved peptide upstream open reading frame 45
 AT5G11420.1 Protein of unknown function, DUF642
 AT2G35640.1 Homeodomain-like superfamily protein

AT1G67090RBCS1A ribulose biphosphate carboxylase small chain 1A

 AT1G29670.1 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT5G60920COB COBRA-like extracellular glycosyl-phosphatidyl inositol-anchore
 AT2G29760OTP81 Tetratricopeptide repeat (TPR)-like superfamily protein
 AT4G09010APX4, TL29 ascorbate peroxidase 4
 AT2G31280CPUORF7 conserved peptide upstream open reading frame 7
 AT5G54190PORA protochlorophyllide oxidoreductase A
 AT5G46690bHLH071 beta HLH protein 71
 AT1G67090RBCS1A ribulose biphosphate carboxylase small chain 1A
 AT3G24450.1 Heavy metal transport/detoxification superfamily protein
 AT5G60030.1
 AT4G00310EDA8, MEE4 Putative membrane lipoprotein
 AT4G04890PDF2 protodermal factor 2
 AT4G10780.1 LRR and NB-ARC domains-containing disease resistance protein
 AT1G71691.2 GDSL-like Lipase/Acylhydrolase superfamily protein
 AT3G14360.1 alpha/beta-Hydrolases superfamily protein
 AT5G65940CHY1 beta-hydroxyisobutyryl-CoA hydrolase 1
 AT3G52820ATPAP22, P purple acid phosphatase 22

y protein

r protein

osyltransferase family protein

albumin superfamily protein

.y protein

r protein

er family protein

albumin superfamily protein

albumin superfamily protein

family protein

albumin superfamily protein

y protein

ide binding;ATP binding;aminoacyl-tRNA ligases

albumin superfamily protein

stein

rotein

albumin superfamily protein

family protein

tor AUX/IAA-related

rotamase
er family protein

albumin superfamily protein

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albumin superfamily protein
family protein

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albumin superfamily protein

r protein

1 (DUF21)

;-like domain

; protein-related

ive / PSI-N, putative (PSAN)

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.y protein

albumin superfamily protein

protein

1

ly protein

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