

Supplementary Table 3. Information and protein analysis of *B. vulgaris*

Gene name	Rename	Number of	Molecular	Theoretical	Instability	Aliphatic	GRAVY	Subcellular
KMT19859	BvuPP2C1	280	30788.81	7.01	44.84	79.43	-0.454	cysk
KMT19915	BvuPP2C2	352	38546.65	5.78	47.61	93.86	-0.263	chlo
KMT19255	BvuPP2C3	385	41876.3	4.95	49.23	82.08	-0.219	nucl
KMT18183	BvuPP2C4	362	39788.86	6.47	38.72	85.08	-0.362	chlo
KMS99377	BvuPP2C5	325	34981.68	5.27	41.21	75.57	-0.437	cyto
KMT18389	BvuPP2C6	398	43931.72	5.65	55.5	75.13	-0.45	chlo
KMT17974	BvuPP2C7	307	34137.49	5.4	33.15	80	-0.369	chlo
KMT17975	BvuPP2C8	318	34552.02	5.44	28.77	88.87	-0.158	chlo
KMT17976	BvuPP2C9	339	37131.28	5.85	37.8	85.13	-0.244	cyto
KMT17978	BvuPP2C10	339	37116.18	5.76	34.4	83.92	-0.254	nucl
KMT17568	BvuPP2C11	384	42830.94	6.9	29.62	86.8	-0.259	chlo
KMT16864	BvuPP2C12	372	40903.16	5.27	49.5	77.39	-0.317	cyto
KMT16942	BvuPP2C13	364	40038.9	4.89	40.05	68.87	-0.448	chlo
KMT16528	BvuPP2C14	370	40909.46	7.6	35.01	80.95	-0.313	nucl
KMT16593	BvuPP2C15	290	33157.91	8.28	60.01	82.34	-0.53	nucl
KMT15979	BvuPP2C16	390	43037.15	6.29	45.25	99.03	-0.112	chlo
KMT16063	BvuPP2C17	448	49277.18	4.87	48.74	75.94	-0.458	chlo
KMT15253	BvuPP2C18	659	72899.3	5.83	43.2	90.91	-0.164	cyto
KMT14735	BvuPP2C19	472	52058.78	5.15	38.17	83.26	-0.347	chlo
KMT14266	BvuPP2C20	372	41446.08	5.58	38.74	81.24	-0.265	nucl
KMT14277	BvuPP2C21	607	66833.87	8.01	37.72	106.75	0.115	cyto
KMT14280	BvuPP2C22	427	45844.42	5.92	37.67	89.93	-0.13	chlo
KMT13143	BvuPP2C23	293	32251.41	5.45	27.51	86.52	-0.355	cyto
KMS97656	BvuPP2C24	341	37527.45	4.95	44.41	81	-0.357	cyto
KMS97527	BvuPP2C25	345	37243.19	6.76	42.63	85.19	-0.199	nucl
KMT11924	BvuPP2C26	353	38217.19	4.86	50.14	86.63	-0.178	cyto
KMT11702	BvuPP2C27	781	86199.06	5.37	45	73.62	-0.531	nucl
KMT10234	BvuPP2C28	1011	113780.3	5.5	43.67	80.15	-0.355	nucl
KMT10019	BvuPP2C29	355	39236.47	4.83	51.85	91.21	-0.112	nucl
KMT08235	BvuPP2C30	425	46265.93	7.92	36.96	89.22	-0.236	nucl
KMT07764	BvuPP2C31	421	46775.48	7.92	55.4	84.63	-0.409	cyto
KMT07504	BvuPP2C32	945	107505	5.48	47.83	99.26	-0.157	chlo
KMS96879	BvuPP2C33	379	42590.52	8.19	41.41	83.03	-0.375	nucl
KMT06504	BvuPP2C34	803	87963.03	5.49	44.93	79.94	-0.402	cyto
KMT06642	BvuPP2C35	453	50105.74	5.58	37.18	70.4	-0.516	nucl
KMT05026	BvuPP2C36	354	38490.78	5.85	51.06	86.19	-0.234	chlo
KMT05175	BvuPP2C37	431	47150.13	5.31	50.93	77.29	-0.315	chlo
KMT05253	BvuPP2C38	714	78607.63	5.48	45.94	72.35	-0.478	nucl
KMT05380	BvuPP2C39	284	30514.53	5.1	31.75	86.83	-0.08	chlo
KMS96860	BvuPP2C40	496	54015.63	4.7	46.43	86.67	-0.294	chlo
KMT03633	BvuPP2C41	366	40966.49	8.92	48.47	88.14	-0.28	chlo
KMT03608	BvuPP2C42	371	40912.15	4.9	45.45	88.52	-0.237	chlo
KMT03150	BvuPP2C43	1077	119760.4	5.02	43.54	88.57	-0.231	chlo
KMT03195	BvuPP2C44	361	39082.55	5.33	67.61	73.68	-0.366	chlo
KMT02412	BvuPP2C45	283	31192.72	6.6	39.19	85.44	-0.36	cyto
KMT01996	BvuPP2C46	477	52373.76	5.07	45.21	73.96	-0.354	chlo
KMT01359	BvuPP2C47	249	27563.76	9.53	42.57	99.84	-0.159	vacu
KMT01500	BvuPP2C48	282	30458.23	7.13	34	81.63	-0.368	cyto
KMT01059	BvuPP2C49	340	38000.6	4.96	57.85	76.88	-0.632	cyto