

Table S5 Members of GST and GST-p genes in *Rosa chinensis* and their sequence characteristics.

Id	Name	Chr	Amino acid	Class	Id	Name	Chr	Amino acid	Class
RchiOBHmChr1g0339611	RcGSTU1	1	230	U	RchiOBHmChr7g0181061	RcGSTU41	7	232	U
RchiOBHmChr1g0339631	RcGSTU2	1	230	U	RchiOBHmChr7g0181091	RcGSTU42	7	232	U
RchiOBHmChr1g0339651	RcGSTU3	1	230	U	RchiOBHmChr7g0181111	RcGSTU43	7	234	U
RchiOBHmChr1g0339761	RcGSTU4	1	173	U	RchiOBHmChr7g0181241	RcGSTU44	7	233	U
RchiOBHmChr1g0339771	RcGSTU5	1	223	U	RchiOBHmChr7g0181251	RcGSTU45	7	231	U
RchiOBHmChr1g0339781	RcGSTU6	1	230	U	RchiOBHmChr7g0181261	RcGSTU46	7	234	U
RchiOBHmChr1g0364471	RcGSTU7	1	185	U	RchiOBHmChr7g0181301	RcGSTU47	7	183	U
RchiOBHmChr1g0364481	RcGSTU8	1	221	U	RchiOBHmChr7g0181321	RcGSTU48	7	233	U
RchiOBHmChr1g0364501	RcGSTU9	1	226	U	RchiOBHmChr7g0215201	RcGSTU49	7	224	U
RchiOBHmChr3g0464521	RcGSTU10	3	217	U	RchiOBHmChr7g0237741	RcGSTU50	7	232	U
RchiOBHmChr3g0464531	RcGSTU11	3	226	U	RchiOBHmChr2g0152311	RcGSTF1	2	214	F
RchiOBHmChr3g0464541	RcGSTU12	3	222	U	RchiOBHmChr3g0488551	RcGSTF2	3	214	F
RchiOBHmChr3g0475891	RcGSTU13	3	206	U	RchiOBHmChr6g0293301	RcGSTF3	6	218	F
RchiOBHmChr4g0396351	RcGSTU14	4	227	U	RchiOBHmChr6g0293321	RcGSTF4	6	215	F
RchiOBHmChr4g0396421	RcGSTU15	4	225	U	RchiOBHmChr6g0293341	RcGSTF5	6	214	F
RchiOBHmChr4g0396431	RcGSTU16	4	233	U	RchiOBHmChr6g0303771	RcGSTF6	6	218	F
RchiOBHmChr4g0396461	RcGSTU17	4	213	U	RchiOBHmChr7g0215041	RcGSTF7	7	217	F
RchiOBHmChr4g0439891	RcGSTU18	4	226	U	RchiOBHmChr1g0364651	RcGSTL1	1	311	L
RchiOBHmChr4g0445201	RcGSTU19	4	233	U	RchiOBHmChr1g0364661	RcGSTL2	1	296	L
RchiOBHmChr5g0026581	RcGSTU20	5	219	U	RchiOBHmChr3g0468151	RcGSTL3	3	236	L
RchiOBHmChr5g0027291	RcGSTU21	5	220	U	RchiOBHmChr3g0468161	RcGSTL4	3	236	L
RchiOBHmChr5g0027311	RcGSTU22	5	218	U	RchiOBHmChr7g0218201	RcGSTZ1	7	218	Z
RchiOBHmChr5g0027331	RcGSTU23	5	219	U	RchiOBHmChr7g0218231	RcGSTZ2	7	218	Z
RchiOBHmChr5g0027341	RcGSTU24	5	218	U	RchiOBHmChr7g0218251	RcGSTZ3	7	222	Z
RchiOBHmChr5g0027351	RcGSTU25	5	219	U	RchiOBHmChr7g0198031	RcGSTT1	7	275	T
RchiOBHmChr5g0027361	RcGSTU26	5	254	U	RchiOBHmChr1g0365431	RcDHAR1	1	213	DHAR
RchiOBHmChr5g0027381	RcGSTU27	5	216	U	RchiOBHmChr3g0493051	RcDHAR2	3	262	DHAR
RchiOBHmChr5g0027401	RcGSTU28	5	217	U	RchiOBHmChr6g0296751	RcTCHQD	6	267	TCHQD
RchiOBHmChr5g0067311	RcGSTU29	5	220	U	RchiOBHmChr7g0220411	RcEF1By1	7	421	EF1By
RchiOBHmChr6g0285721	RcGSTU30	6	208	U	RchiOBHmChr7g0230101	RcEF1By2	7	249	EF1By
RchiOBHmChr6g0285731	RcGSTU31	6	224	U	RchiOBHmChr7g0230191	RcEF1By3	7	418	EF1By

RchiOBHmChr6g0285741	RcGSTU32	6	225	U	RchiOBHmChr5g0020071	RcGHR1	5	328	GHR
RchiOBHmChr6g0285761	RcGSTU33	6	230	U	RchiOBHmChr6g0286841	RcGHR2	6	420	GHR
RchiOBHmChr6g0285771	RcGSTU34	6	223	U	RchiOBHmChr3g0473831	RcGST2N-1	3	339	GST2N
RchiOBHmChr6g0285781	RcGSTU35	6	222	U	RchiOBHmChr7g0231111	RcGST2N-2	7	338	GST2N
RchiOBHmChr6g0285821	RcGSTU36	6	223	U	RchiOBHmChr6g0303331	RcmPGES2-1	6	321	mPGES-2
RchiOBHmChr6g0285831	RcGSTU37	6	237	U	RchiOBHmChr7g0178351	RcmPGES2-2	7	330	mPGES-2
RchiOBHmChr7g0179081	RcGSTU38	7	216	U	RchiOBHmChr3g0491671	RcGSTM1	3	149	M
RchiOBHmChr7g0179091	RcGSTU39	7	213	U	RchiOBHmChr3g0491701	RcGSTM2	3	149	M
RchiOBHmChr7g0179101	RcGSTU40	7	225	U	RchiOBHmChr3g0491741	RcGSTM3	3	149	M
RchiOBHmChr1g0327741	RcGSTU-p1	1	120	U	RchiOBHmChr1g0350551	RcGSTZ-p1	1	272	Z
RchiOBHmChr1g0339671	RcGSTU-p2	1	124	U	RchiOBHmChr1g0340781	RcEF1By-p1	1	103	EF1By
RchiOBHmChr1g0339691	RcGSTU-p3	1	98	U	RchiOBHmChr6g0304001	RcEF1By-p2	6	99	EF1By
RchiOBHmChr1g0339911	RcGSTU-p4	1	61	U	RchiOBHmChr7g0229491	RcEF1By-p3	7	224	EF1By
RchiOBHmChr1g0364511	RcGSTU-p5	1	116	U	RchiOBHmChr7g0229531	RcEF1By-p4	7	269	EF1By
RchiOBHmChr4g0396391	RcGSTU-p6	4	120	U	RchiOBHmChr7g0229581	RcEF1By-p5	7	130	EF1By
RchiOBHmChr4g0396441	RcGSTU-p7	4	128	U	RchiOBHmChr7g0229591	RcEF1By-p6	7	45	EF1By
RchiOBHmChr4g0396451	RcGSTU-p8	4	80	U	RchiOBHmChr7g0229701	RcEF1By-p7	7	134	EF1By
RchiOBHmChr4g0396521	RcGSTU-p9	4	155	U	RchiOBHmChr7g0229711	RcEF1By-p8	7	227	EF1By
RchiOBHmChr4g0400161	RcGSTU-p10	4	127	U	RchiOBHmChr7g0229951	RcEF1By-p9	7	80	EF1By
RchiOBHmChr5g0027391	RcGSTU-p11	5	119	U	RchiOBHmChr7g0230081	RcEF1By-p10	7	122	EF1By
RchiOBHmChr5g0060741	RcGSTU-p12	5	150	U	RchiOBHmChr7g0230221	RcEF1By-p11	7	238	EF1By
RchiOBHmChr6g0252711	RcGSTU-p13	6	123	U	RchiOBHmChr7g0231551	RcEF1By-p12	7	76	EF1By
RchiOBHmChr6g0285791	RcGSTU-p14	6	135	U	RchiOBHmChr4g0400191	RcGSTM-p1	4	379	Metaxin
RchiOBHmChr7g0181081	RcGSTU-p15	7	254	U	RchiOBHmChr7g0191431	RcGSTM-p2	7	252	Metaxin
RchiOBHmChr6g0293331	RcGSTF-p1	6	119	F	RchiOBHmChr7g0191541	RcGSTM-p3	7	380	Metaxin