

Supplementary Material (Marina Arias).

First genetic linkage map of *Taraxacum koksaghyz* Rodin based on AFLP, SSR, COS and EST-SSR markers.

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**Supplementary Table S1: Polymorphisms and map locations of COS, SSR and EST-SSR markers**

**a) MARKERS generating segregating polymorphisms for Linkage Mapping**

Marker Name	Type	Original Name	Origin	Species	LG	Position (cM)
A25	COS	A25	25	<i>Helianthus annuus L., Lactuca sativa L</i>	NM	NM
A19	COS	A19	25	<i>Helianthus annuus L., Lactuca sativa L</i>	8	43.8
A27	COS	A27	25	<i>Helianthus annuus L., Lactuca sativa L</i>	3	94.4
B12	COS	B12	25	<i>Helianthus annuus L., Lactuca sativa L</i>	4	123.1
C29	COS	C29	25	<i>Helianthus annuus L., Lactuca sativa L</i>	1	11.9
C06	COS	C06	25	<i>Helianthus annuus L., Lactuca sativa L</i>	6	27.3
D05	COS	D05	25	<i>Helianthus annuus L., Lactuca sativa L</i>	3	40.9
SML038	SSR	SML038	27	<i>Lactuca sativa, Lactuca serriola</i>	4	41.4
TC1	EST-SSR	CTO25807.b1_M11.ab1	26	<i>Taraxacum officinale</i>	4	97.2
TC6 a, b	EST-SSR	CTOX13028.b1_H18.ab1	26	<i>Taraxacum officinale</i>	8, 7	48.9/ 38.6
TC8 a, b	EST-SSR	CTOX2895.b1_M04.ab1	26	<i>Taraxacum officinale</i>	7, 5	39.5/ 42
TC13	EST-SSR	CTOY10260.b1_G22.ab1	26	<i>Taraxacum officinale</i>	1	17.7
TC14	EST-SSR	CTOX1362.b1_C06.ab1	26	<i>Taraxacum officinale</i>	7	22.9
TC16	EST-SSR	CTOY12295.b1_M01.ab1	26	<i>Taraxacum officinale</i>	4	50.7
TC19	EST-SSR	CTOY16062.b1_L08.ab1	26	<i>Taraxacum officinale</i>	8	26.9
TC22	EST-SSR	CTOX15864.b2_P05.ab1	26	<i>Taraxacum officinale</i>	4	NM
TC25	EST-SSR	CTOY16815.b1_N04.ab1	26	<i>Taraxacum officinale</i>	2	69.5
TC26	EST-SSR	CTOY6705.b1_B21.ab1	26	<i>Taraxacum officinale</i>	5	92.5
TC27	EST-SSR	CTOY16332.b1_G04.ab1	26	<i>Taraxacum officinale</i>	7	64.7
TC28 a, b	EST-SSR	CTOY9502.b1_K24.ab1	26	<i>Taraxacum officinale</i>	1, 4	73.2/ 12.8
TC29	EST-SSR	CTOZ2149.b1_I10.ab1	26	<i>Taraxacum officinale</i>	1	11.5
TC31	EST-SSR	CTOY14088.b1_O18.ab1	26	<i>Taraxacum officinale</i>	5	9.3
TC32	EST-SSR	CTOY6345.b1_A04.ab1	26	<i>Taraxacum officinale</i>	4	7.9
TC38	EST-SSR	CTOX4156.b1_H08.ab1	26	<i>Taraxacum officinale</i>	4	133.1
TC41	EST-SSR	CTOX6656.b1_P07.ab1	26	<i>Taraxacum officinale</i>	4	63.3
TC42	EST-SSR	CTOX3406.b1_L12.ab1	26	<i>Taraxacum officinale</i>	5	27.1
TC45	EST-SSR	CTOY15765.b1_I05.ab1	26	<i>Taraxacum officinale</i>	5	89.8
TC46	EST-SSR	CTOX3118.b1_K11.ab1	26	<i>Taraxacum officinale</i>	6	7.7
TC49	EST-SSR	CTOY12359.b1_M17.ab1	26	<i>Taraxacum officinale</i>	1	64.8
TC50	EST-SSR	CTOY4713.b1_B03.ab1	26	<i>Taraxacum officinale</i>	7	59.2
TC60	EST-SSR	CTOX20584.b1_O10.ab1	26	<i>Taraxacum officinale</i>	5	75.3
TC61	EST-SSR	CTOX21360.b1_O12.ab1	26	<i>Taraxacum officinale</i>	3	65.2
TC66	EST-SSR	CTOZ5866.b1_D03.ab1	26	<i>Taraxacum officinale</i>	7	66.1
TC69	EST-SSR	CTOY541.b1_J15.ab1	26	<i>Taraxacum officinale</i>	2	33.7
TC71	EST-SSR	CTOY7144.b1_O10.ab1	26	<i>Taraxacum officinale</i>	4	52.7
TC73	EST-SSR	CTO26139.b1_F24.ab1	26	<i>Taraxacum officinale</i>	6	20.0
TC77	EST-SSR	CTOY6581.b1_I13.ab1	26	<i>Taraxacum officinale</i>	5	118.6
TC80	EST-SSR	CTOX3167.b1_M23.ab1	26	<i>Taraxacum officinale</i>	3	68.5
TC82	EST-SSR	CTOX10820.b1_G17.ab1	26	<i>Taraxacum officinale</i>	4	29.3/4.1
TC83	EST-SSR	CTOY2493.b1_J23.ab1	26	<i>Taraxacum officinale</i>	3	59.8
TC84	EST-SSR	CTOX21042.b2_D06.ab1	26	<i>Taraxacum officinale</i>	1	82.1
TC333	EST-SSR	CTOZ557.b1_J19.ab1	26	<i>Taraxacum officinale</i>	4	92.5
TC366	EST-SSR	CTOX2226.b1_D06.ab1	26	<i>Taraxacum officinale</i>	NM	NM
TC129	EST-SSR	CTOX3546.b1_C23.ab1	26	<i>Taraxacum officinale</i>	3	59.8
TC324	EST-SSR	CTOY9549.b1_J12.ab1	26	<i>Taraxacum officinale</i>	3	9.7
TC128	EST-SSR	CTOX3025.b1_B14.ab1	26	<i>Taraxacum officinale</i>	1	36.1
TC249	EST-SSR	CTOY7335.b1_M09.ab1	26	<i>Taraxacum officinale</i>	1	68.7
TC295	EST-SSR	CTOY11596.b1_G19.ab1	26	<i>Taraxacum officinale</i>	4	12.8
TC165	EST-SSR	CTOX11102.b1_L16.ab1	26	<i>Taraxacum officinale</i>	6	73.7
TC585	EST-SSR	CTOY13605.b1_J17.ab1	26	<i>Taraxacum officinale</i>	1	101.4
TC438	EST-SSR	CTOY8370.b1_D06.ab1	26	<i>Taraxacum officinale</i>	5	92.5
TC713	EST-SSR	CTOX10577.b1_A06.ab1	26	<i>Taraxacum officinale</i>	5	49.9
TC461	EST-SSR	CTOX11812.b1_H02.ab1	26	<i>Taraxacum officinale</i>	5	118.6
TC2059	EST-SSR	CTOX13056.b1_P24.ab1	26	<i>Taraxacum officinale</i>	8	0.0
TC303	EST-SSR	CTOY15535.b1_N19.ab1	26	<i>Taraxacum officinale</i>	1	38.2
TC380	EST-SSR	CTOY10164.b1_H21.ab1	26	<i>Taraxacum officinale</i>	1	47.3
TC428 a, b	EST-SSR	CTOY6406.b1_K18.ab1	26	<i>Taraxacum officinale</i>	1, 4	74.0/ 12.8
TC454	EST-SSR	CTOX10662.b1_L02.ab1	26	<i>Taraxacum officinale</i>	2	33.3
TC494	EST-SSR	CTOX17932.b1_G20.ab1	26	<i>Taraxacum officinale</i>	3	27.6
TC506	EST-SSR	CTOX20035.b1_E17.ab1	26	<i>Taraxacum officinale</i>	5	20.5
TC624	EST-SSR	CTOY6017.b1_A18.ab1	26	<i>Taraxacum officinale</i>	7	56.2
TC731	EST-SSR	CTOX1290.b1_D11.ab1	26	<i>Taraxacum officinale</i>	7	96.1
TC946 a, b, c	EST-SSR	CTOY13679.b1_M12.ab1	26	<i>Taraxacum officinale</i>	8, 7, 6	88.9/ 14.1/ 71.7
TC1107	EST-SSR	CTOX12029.b1_J07.ab1	26	<i>Taraxacum officinale</i>	4	20.6
TC360	EST-SSR	CTOX20447.b1_M23.ab1	26	<i>Taraxacum officinale</i>	7	26.1
TC365	EST-SSR	CTOX22195.b1_F06.ab1	26	<i>Taraxacum officinale</i>	4	7.9
R1210L3 (1)	STS	R1210L3 (1)	29	<i>Cichorium intybus</i>	----	----
L101L1/R1 (3)	STS	L101L1/R1 (3)	29	<i>Cichorium intybus</i>	----	----
AF497999L2 (1)	STS	AF497999L2 (1)	29	<i>Cichorium intybus</i>	----	----

**Legend:** NM: Not Mapped; COS: Conserved Ortholog Set; SSR: Simple Sequence Repeat; EST-SSR: Expressed Sequence Tag-Simple Sequence Repeat; STS: Sequence-Tagged Sites; TC: EST-SSR given name; Origin: Bibliographic reference.

**b) MARKERS without useful amplification products or monomorphic**

Marker	Type	Original Name	Origin	Species	Marker	Type	Original Name	Origin	Species
D22	COS	D22	25	<i>H. annuus L., L. sativa L.</i>	TC11	EST-SSR	CTOX13045.b1_J22.ab1	26	<i>Taraxacum officinale</i>
A28	COS	A28	25	<i>H. annuus L., L. sativa L.</i>	TC12	EST-SSR	CTOY8308.b1_G14.ab1	26	<i>Taraxacum officinale</i>
A39	COS	A39	25	<i>H. annuus L., L. sativa L.</i>	TC15	EST-SSR	CTOY10102.b1_L05.ab1	26	<i>Taraxacum officinale</i>
B07	COS	B07	25	<i>H. annuus L., L. sativa L.</i>	TC17	EST-SSR	CTOY17001.b1_B03.ab1	26	<i>Taraxacum officinale</i>
B27	COS	B27	25	<i>H. annuus L., L. sativa L.</i>	TC18	EST-SSR	CTOY8178.b1_D05.ab1	26	<i>Taraxacum officinale</i>
C32	COS	C32	25	<i>H. annuus L., L. sativa L.</i>	TC20	EST-SSR	CTOZ5155.b1_F17.ab1	26	<i>Taraxacum officinale</i>
D22	COS	D22	25	<i>H. annuus L., L. sativa L.</i>	TC21	EST-SSR	CTOY7019.b1_F03.ab1	26	<i>Taraxacum officinale</i>
A33	COS	A33	25	<i>H. annuus L., L. sativa L.</i>	TC23	EST-SSR	CTOX17822.b1_L15.ab1	26	<i>Taraxacum officinale</i>
C01	COS	C01	25	<i>H. annuus L., L. sativa L.</i>	TC24	EST-SSR	CTOY11228.b1_G23.ab1	26	<i>Taraxacum officinale</i>
A01	COS	A01	25	<i>H. annuus L., L. sativa L.</i>	TC30	EST-SSR	CTOX5018.b1_C07.ab1	26	<i>Taraxacum officinale</i>
A02	COS	A02	25	<i>H. annuus L., L. sativa L.</i>	TC33	EST-SSR	CTOX1131.b1_F20.ab1	26	<i>Taraxacum officinale</i>
A03	COS	A03	25	<i>H. annuus L., L. sativa L.</i>	TC34	EST-SSR	CTOY16350.b1_K08.ab1	26	<i>Taraxacum officinale</i>
A04	COS	A04	25	<i>H. annuus L., L. sativa L.</i>	TC35	EST-SSR	CTOY9350.b1_L09.ab1	26	<i>Taraxacum officinale</i>
A05	COS	A05	25	<i>H. annuus L., L. sativa L.</i>	TC36	EST-SSR	CTOX18095.b1_M11.ab1	26	<i>Taraxacum officinale</i>
A06	COS	A06	25	<i>H. annuus L., L. sativa L.</i>	TC37	EST-SSR	CTOX22367.b1_M23.ab1	26	<i>Taraxacum officinale</i>
A07	COS	A07	25	<i>H. annuus L., L. sativa L.</i>	TC39	EST-SSR	CTOY12186.b1_C24.ab1	26	<i>Taraxacum officinale</i>
A08	COS	A08	25	<i>H. annuus L., L. sativa L.</i>	TC40	EST-SSR	CTOY4029.b1_J23.ab1	26	<i>Taraxacum officinale</i>
A09	COS	A09	25	<i>H. annuus L., L. sativa L.</i>	TC43	EST-SSR	CTOY15841.b1_B01.ab1	26	<i>Taraxacum officinale</i>
A10	COS	A10	25	<i>H. annuus L., L. sativa L.</i>	TC44	EST-SSR	CTOX10565.b1_I02.ab1	26	<i>Taraxacum officinale</i>
SML023	SSR	SML023	27	<i>L. serriola L., L. sativa L.</i>	TC47	EST-SSR	CTOY14348.b1_H11.ab1	26	<i>Taraxacum officinale</i>
SML026	SSR	SML026	27	<i>L. serriola L., L. sativa L.</i>	TC48	EST-SSR	CTOY10472.b1_P01.ab1	26	<i>Taraxacum officinale</i>
SML027	SSR	SML027	27	<i>L. serriola L., L. sativa L.</i>	TC51	EST-SSR	CTOX16123.b2_F24.ab1	26	<i>Taraxacum officinale</i>
SML031	SSR	SML031	27	<i>L. serriola L., L. sativa L.</i>	TC52	EST-SSR	CTOY15494.b1_L09.ab1	26	<i>Taraxacum officinale</i>
SML033	SSR	SML033	27	<i>L. serriola L., L. sativa L.</i>	TC53	EST-SSR	CTOY4904.b1_P02.ab1	26	<i>Taraxacum officinale</i>
SML034	SSR	SML034	27	<i>L. serriola L., L. sativa L.</i>	TC54	EST-SSR	CTOX13472.b1_O07.ab1	26	<i>Taraxacum officinale</i>
SML037	SSR	SML037	27	<i>L. serriola L., L. sativa L.</i>	TC55	EST-SSR	CTOX844.b1_G19.ab1	26	<i>Taraxacum officinale</i>
SML044	SSR	SML044	27	<i>L. serriola L., L. sativa L.</i>	TC56	EST-SSR	CTOY2219.b1_F04.ab1	26	<i>Taraxacum officinale</i>
SML054	SSR	SML054	27	<i>L. serriola L., L. sativa L.</i>	TC57	EST-SSR	CTOY9300.b1_G21.ab1	26	<i>Taraxacum officinale</i>
AF49800L2/R2	STSs	AF49800L2/R2	29	<i>Cichorium intybus</i>	TC58	EST-SSR	CTOX12095.b1_N23.ab1	26	<i>Taraxacum officinale</i>
CIFRUCTOSL3/R2	STSs	CIFRUCTOSL3/R2	29	<i>Cichorium intybus</i>	TC59	EST-SSR	CTOX17553.b1_A22.ab1	26	<i>Taraxacum officinale</i>
SKL95UTR9LI9R6	STSs	SKL95UTR9LI9R6	29	<i>Cichorium intybus</i>	TC62	EST-SSR	CTOY4099.b1_E18.ab1	26	<i>Taraxacum officinale</i>
3262L1/R1	STSs	3262L1/R1	29	<i>Cichorium intybus</i>	TC63	EST-SSR	CTOY8251.b1_F23.ab1	26	<i>Taraxacum officinale</i>
cAMP2L2/R2	STSs	cAMP2L2/R2	29	<i>Cichorium intybus</i>	TC64	EST-SSR	CTOX10454.b1_K21.ab1	26	<i>Taraxacum officinale</i>
CIPinvert L2/R2	STSs	CIPinvert L2/R2	29	<i>Cichorium intybus</i>	TC65	EST-SSR	CTOY13783.b1_N14.ab1	26	<i>Taraxacum officinale</i>
TubulinL2/R2	STSs	TubulinL2/R2	29	<i>Cichorium intybus</i>	TC67	EST-SSR	CTOY5074.b1_C21.ab1	26	<i>Taraxacum officinale</i>
ORS543	SSR	ORS543	28	<i>Helianthus annuus L</i>	TC68	EST-SSR	CTOX1070.b1_L04.ab1	26	<i>Taraxacum officinale</i>
ORS342	SSR	ORS342	28	<i>Helianthus annuus L</i>	TC70	EST-SSR	CTOX21376.b1_O16.ab1	26	<i>Taraxacum officinale</i>
ORS665	SSR	ORS665	28	<i>Helianthus annuus L</i>	TC72	EST-SSR	CTOY9753.b1_B15.ab1	26	<i>Taraxacum officinale</i>
ORS309	SSR	ORS309	28	<i>Helianthus annuus L</i>	TC74	EST-SSR	CTOX19900.b1_H08.ab1	26	<i>Taraxacum officinale</i>
ORS1024	SSR	ORS1024	28	<i>Helianthus annuus L</i>	TC75	EST-SSR	CTOY16997.b1_I01.ab1	26	<i>Taraxacum officinale</i>
ORS483	SSR	ORS483	28	<i>Helianthus annuus L</i>	TC76	EST-SSR	CTOY4329.b1_B03.ab1	26	<i>Taraxacum officinale</i>
ORS1041	SSR	ORS1041	28	<i>Helianthus annuus L</i>	TC78	EST-SSR	CTOX12491.b1_E04.ab1	26	<i>Taraxacum officinale</i>
ORS1161	SSR	ORS1161	28	<i>Helianthus annuus L</i>	TC79	EST-SSR	CTOX1466.b1_D08.ab1	26	<i>Taraxacum officinale</i>
ORS844	SSR	ORS844	28	<i>Helianthus annuus L</i>	TC81	EST-SSR	CTOY10374.b1_K01.ab1	26	<i>Taraxacum officinale</i>
ORS437	SSR	ORS437	28	<i>Helianthus annuus L</i>	TC320	EST-SSR	CTOY7284.b1_H22.ab1	26	<i>Taraxacum officinale</i>
ORS1146	SSR	ORS1146	28	<i>Helianthus annuus L</i>	TC326	EST-SSR	*CTOZ1627.b1_E23.ab1	26	<i>Taraxacum officinale</i>
ORS778	SSR	ORS778	28	<i>Helianthus annuus L</i>	TC294	EST-SSR	CTOY10206.b1_K08.ab1	26	<i>Taraxacum officinale</i>
ORS1179	SSR	ORS1179	28	<i>Helianthus annuus L</i>	TC93	EST-SSR	CTOX21614.b1_L03.ab1	26	<i>Taraxacum officinale</i>
ORS307	SSR	ORS307	28	<i>Helianthus annuus L</i>	TC444	EST-SSR	CTOZ1761.b1_A10.ab1	26	<i>Taraxacum officinale</i>
ORS687	SSR	ORS687	28	<i>Helianthus annuus L</i>	TC386	EST-SSR	CTOY11590.b1_K17.ab1	26	<i>Taraxacum officinale</i>
ORS750	SSR	ORS750	28	<i>Helianthus annuus L</i>	TC188	EST-SSR	CTOX13943.b1_N05.ab1	26	<i>Taraxacum officinale</i>
ORS735	SSR	ORS735	28	<i>Helianthus annuus L</i>	TC365	EST-SSR	CTOX22195.b1_F06.ab1	26	<i>Taraxacum officinale</i>
Let1	COS-EST	QGF13H13.yg.ab1	27	<i>L. serriola L., L. sativa L.</i>	TC418	EST-SSR	CTOY3757.b1_J04.ab1	26	<i>Taraxacum officinale</i>
Let2	COS-EST	QGD7O20.yg.ab1	27	<i>L. serriola L., L. sativa L.</i>	TC1555	EST-SSR	CTOY3131.b1_E15.ab1	26	<i>Taraxacum officinale</i>
Let3	COS-EST	QG_CA_Contig1410	27	<i>L. serriola L., L. sativa L.</i>	TC562	EST-SSR	CTOY10304.b1_P08.ab1	26	<i>Taraxacum officinale</i>
Let4	COS-EST	QG_CA_Contig6178	27	<i>L. serriola L., L. sativa L.</i>	TC489	EST-SSR	CTOX16428.b1_H04.ab1	26	<i>Taraxacum officinale</i>
Let5	COS-EST	QGF23G16.yg.ab1	27	<i>L. serriola L., L. sativa L.</i>	TC543	EST-SSR	CTOX4545.b1_B10.ab1	26	<i>Taraxacum officinale</i>
TC2	EST-SSR	CTOX19837.b1_I16.ab1	26	<i>Taraxacum officinale</i>	TC624	EST-SSR	CTOY6017.b1_A18.ab1	26	<i>Taraxacum officinale</i>
TC3	EST-SSR	CTOY2052.b1_H09.ab1	26	<i>Taraxacum officinale</i>	TC604	EST-SSR	CTOY1842.b1_D06.ab1	26	<i>Taraxacum officinale</i>
TC4	EST-SSR	CTOX15289.b1_B08.ab1	26	<i>Taraxacum officinale</i>	TC946	EST-SSR	CTOY13679.b1_M12.ab1	26	<i>Taraxacum officinale</i>
TC5	EST-SSR	CTOX18135.b1_M21.ab1	26	<i>Taraxacum officinale</i>	TC1022	EST-SSR	CTOY6770.b1_C14.ab1	26	<i>Taraxacum officinale</i>
TC7	EST-SSR	CTOX2872.b1_P21.ab1	26	<i>Taraxacum officinale</i>	TC712	EST-SSR	CTOX1043.b1_E22.ab1	26	<i>Taraxacum officinale</i>
TC9	EST-SSR	CTOX6666.b1_D11.ab1	26	<i>Taraxacum officinale</i>	TC513	EST-SSR	CTOX20664.b1_P06.ab1	26	<i>Taraxacum officinale</i>
TC10	EST-SSR	CTOX18729.b2_B04.ab1	26	<i>Taraxacum officinale</i>					

**Legend:** NM: Not Mapped; COS: Conserved Ortholog Set; SSR: Simple Sequence Repeat; EST-SSR: Expressed Sequence Tag-Simple Sequence Repeat; STS: Sequence-Tagged Sites; TC: EST-SSR given name; Reference: Bibliographic reference.

**Supplementary Table S2: Obtained homologies of TC markers using Blast2Go.**

SEQNAME	DESCRIPTION	LENGTH	HITS	E-VALUE	SIM MEAN	GO	GO NAMES LIST	ENZYME CODES
TC1107	zinc ion binding	892	20	1.9E-85	69.65%	1	F:metal ion binding	-
TC128	u-box domain-containing protein 7-like	928	20	6.3E-33	61.65%	1	F:protein binding	-
TC129	mannanendo- $\beta$ -mannosidase 2-like	914	20	3.9E-41	78.25%	2	F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process	-
TC13	coiled-coil domain-containing protein 97	906	20	5.9E-103	78%	2	P:biological_process; C:cellular_component	-
TC165	probable arabinosyltransferase arad1	819	20	2.3E-24	79.65%	3	P:biological_process; F:transferase activity; P:metabolic process	-
TC19	protein n-lysine methyltransferase mett121a	905	20	6.6E-123	83.25%	4	F:histone acetyltransferase activity; F:methyltransferase activity; P:histone acetylation; P:methylation	EC:2.3.1.48; EC:2.3.1
TC2059	actin-related protein 9	392	20	7.6E-45	83.9%	3	C:Ino80 complex; P:chromatin remodeling; P:vegetative to reproductive phase transition of meristem	-
TC22A	Something about silencing protein 10	906	20	4.8E-58	67.05%	0	-	-
TC22B	Something about silencing protein 10	906	20	4.8E-58	67.05%	0	-	-
TC249	Coatomer subunit zeta-1-like protein	790	20	2.0E-100	95.65%	8	C:membrane; P:protein folding; P:response to heat; P:response to high light intensity; P:protein transport; P:response to endoplasmic reticulum stress; P:response to hydrogen peroxide; P:positive regulation of transcription, DNA-templated	-
TC25	uncharacterized calcium-binding protein at1g02270-like isoform x2	883	20	9.7E-89	78.75%	1	F:calcium ion binding	-
TC27	duf581 family protein	660	20	9.0E-20	79.35%	-	-	-
TC28	gpi-anchor transamidase isoform x1	874	20	1.2E-80	96.85%	7	C:GPI-anchor transamidase complex; F:GPI-anchor transamidase activity; F:cysteine-type endopeptidase activity; P:proteolysis; P:sterol biosynthetic process; P:attachment of GPI anchor to protein; P:sphingoid biosynthetic process	EC:3.4.22; EC:3.4; EC:3
TC29	Nucleolar protein	558	20	4.5E-31	63.45%	3	P:root hair cell differentiation; P:biological_process; C:integral component of membrane	-
TC295	PREDICTED: uncharacterized protein LOC101202853 isoform X1	485	20	1.4E-16	68.65%	1	C:Golgi apparatus	-
TC303	glycerol-3-phosphate acyltransferase	818	20	3.0E-61	75.25%	6	C:chloroplast; F:transferase activity, transferring acyl groups; P:isoprenoid biosynthetic process; P:monocarboxylic acid metabolic process; P:pigment biosynthetic process; P:glycerophospholipid biosynthetic process	-
TC32	regulator of nonsense transcripts upf3-like isoform x2	825	20	9.0E-30	53.05%	1	F:nucleotide binding	-
TC324	PREDICTED: uncharacterized protein LOC104219523	874	20	3.5E-98	86.35%	9	P:maltose metabolic process; P:phosphatidylglycerol biosynthetic process; P:embryo development ending in seed dormancy; P:thylakoid membrane organization; P:stomatal complex morphogenesis; P:iron-sulfur cluster assembly; P:starch biosynthetic process; P:isopentenyl diphosphate biosynthetic process, methylerythritol 4-phosphate pathway; P:positive regulation of catalytic activity	-
TC360	formin-like protein 8 isoform x2	653	20	6.8E-34	69.65%	1	P:phosphatidylinositol biosynthetic process	-
TC365	probable sphingolipid transporter spinstar homolog 2	873	20	1.9E-110	87.65%	6	C:intracellular; C:integral component of membrane; P:fatty acid beta-oxidation; P:sterol biosynthetic process; P:protein import into peroxisome matrix; P:sphingoid biosynthetic process	-
TC366	probable inactive receptor kinase at1g48480	943	20	1.1E-68	72.75%	4	C:membrane; F:nucleotide binding; F:protein kinase activity; P:phosphorylation	-
TC38	PREDICTED: uncharacterized protein LOC105160266 isoform X3	704	12	2.4E-15	51.83%	1	P:cellular process	-
TC41A	PREDICTED: uncharacterized protein LOC105157371	834	20	4.8E-81	91.95%	0	-	-
TC41B	PREDICTED: uncharacterized protein LOC105157371	834	20	4.8E-81	91.95%	-	-	-
TC42	udp-d-epioseudp-d-xylose synthase 2-like	864	20	4.1E-172	95.8%	3	F:catalytic activity; F:coenzyme binding; P:metabolic process	-
TC428	coatomersubunit zeta-1-like	832	20	3.0E-99	95.05%	8	C:membrane; P:protein folding; P:response to heat; P:response to high light intensity; P:protein transport; P:response to endoplasmic reticulum stress; P:response to hydrogen peroxide; P:positive regulation of transcription, DNA-templated	-
TC438	Unnamed protein product	719	20	1.6E-60	78.1%	-	-	-
TC45A	Uncharacterized serine-rich protein	887	20	1.8E-23	79.95%	-	-	-
TC45B	Uncharacterized serine-rich protein	887	20	1.7E-23	79.95%	-	-	-
TC461	udp-glycosyltransferase 84b2-like	789	20	4.1E-82	65.9%	2	F:transferase activity, transferring hexosyl groups; P:metabolic process	-
TC46A	polypyrimidine tract-binding protein homolog 2-like isoform x1	859	20	1.1E-35	66.5%	1	F:nucleotide binding	-
TC46B	polypyrimidine tract-binding protein homolog 2-like isoform x1	859	20	1.1E-35	66.5%	1	F:nucleotide binding	-
TC46C	polypyrimidine tract-binding protein homolog 2-like isoform x1	859	20	1.1E-35	66.5%	1	F:nucleotide binding	-
TC49	rac-like gtp-binding protein arac7	899	20	9.0E-127	94.55%	10	C:intracellular; C:plasma membrane; F:GTPase activity; F:sphingomyelin phosphodiesterase activity; F:GTP binding; P:intracellular protein transport; P:nucleocytoplasmic transport; P:actin filament organization; P:small GTPase mediated signal transduction; P:metabolic process	EC:3.6.1; EC:3.1; EC:3.1.4.12; EC:3.1.1; EC:3.6.1.15
TC494	protein nrt1 ptr family -like	846	20	7.7E-117	83.3%	3	C:membrane; F:transporter activity; P:transport	-
TC506	probable inactive leucine-rich repeat receptor-like protein kinase at3g03770	917	20	2.0E-14	70.55%	4	F:kinase activity; P:phosphorylation; P:response to stimulus; P:organic substance metabolic process	-
TC50A	rab6-interacting golgin-like	868	20	6.7E-76	94.5%	2	C:plasma membrane; P:response to auxin	-
TC50B	rab6-interacting golgin-like	868	20	6.7E-76	94.7%	-	-	-
TC585	F-box family isoform 1	491	20	2.2E-35	55.8%	2	F:DNA binding; P:regulation of transcription, DNA-templated	-
TC60	protein elf4-like 4-like	718	20	1.5E-45	85.1%	-	-	-
TC61A	mannanendo- $\beta$ -mannosidase 2-like	800	20	1.8E-24	76.9%	2	F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process	-
TC61B	mannanendo- $\beta$ -mannosidase 2-like	800	20	1.8E-24	76.9%	2	F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process	-
TC61C	mannanendo- $\beta$ -mannosidase 2-like	800	20	1.8E-24	76.9%	2	F:hydrolase activity, hydrolyzing O-glycosyl compounds; P:carbohydrate metabolic process	-
TC624	benzyl alcohol o-benzoyltransferase	918	20	0.0E0	86.55%	2	F:transferase activity, transferring acyl groups other than amino-acyl groups; P:metabolic process	-
TC66	duf581 family protein	683	20	7.1E-21	76.4%	-	-	-
TC69	rho gdp-dissociation inhibitor 1	826	20	3.4E-65	75.75%	3	C:cytoplasm; F:Rho GDP-dissociation inhibitor activity; P:regulation of catalytic activity	-
TC71	novel plantsnare 13-like	871	20	3.0E-93	90.6%	0	-	-
TC713	rho gtpase activation protein with ph domain isoform 1	857	20	6.3E-61	71.5%	1	P:signal transduction	-
TC73	udp-glucuronic acid decarboxylase 6-like	569	20	1.9E-56	89.7%	3	F:catalytic activity; F:coenzyme binding; P:metabolic process	-
TC731	---NA---	269	0	-	-	-	-	-
TC77	Pyridoxal biosynthesis protein	876	20	6.2E-159	97.05%	18	C:cytosol; C:plasma membrane; C:endomembrane system; F:pyridoxal 5'-phosphate synthase (glutamine hydrolysing) activity; F:protein homodimerization activity; F:protein heterodimerization activity; P:maltose metabolic process; P:pentose-phosphate shunt; P:cellular amino acid metabolic process; P:response to lipid hydroperoxide; P:pyridoxine biosynthetic process; P:response to UV-B; P:response to non-ionic osmotic stress; P:chlorophyll metabolic process; P:starch biosynthetic process; P:hyperosmotic salinity response; P:pyridoxal phosphate biosynthetic process; P:positive regulation of catalytic activity	EC:4.3.3.6
TC80A	serine threonine-protein kinase d6pk	915	20	2.0E-92	88.2%	7	C:nucleolus; C:cytoplasm; F:protein kinase activity; F:ATP binding; P:microtubule cytoskeleton organization; P:cytokinesis by cell plate formation; P:protein phosphorylation	-
TC80B	serine threonine-protein kinase d6pk	915	20	2.0E-92	88.2%	7	C:nucleolus; C:cytoplasm; F:protein kinase activity; F:ATP binding; P:microtubule cytoskeleton organization; P:cytokinesis by cell plate formation; P:protein phosphorylation	-
TC82A	tpr repeat-containing thioredoxin tt1-like	777	20	1.1E-16	59.2%	2	P:cell redox homeostasis; C:cell	-
TC82B	tpr repeat-containing thioredoxin tt1-like	777	20	1.1E-16	59.2%	2	P:cell redox homeostasis; C:cell	-
TC83A	protein elf4-like 4	734	20	2.6E-54	89.85%	-	-	-
TC83B	protein elf4-like 4	734	20	2.6E-54	89.85%	-	-	-
TC83C	protein elf4-like 4	734	20	2.6E-54	89.85%	-	-	-
TC84A	auxilin-related protein 2 isoform x2	712	20	5.3E-16	90.15%	2	F:transferase activity; P:metabolic process	-
TC84B	auxilin-related protein 2 isoform x2	712	20	5.3E-16	90.15%	2	F:transferase activity; P:metabolic process	-
TC84C	auxilin-related protein 2 isoform x2	712	20	5.3E-16	90.15%	2	F:transferase activity; P:metabolic process	-
TC84D	auxilin-related protein 2 isoform x2	712	20	5.3E-16	90.15%	2	F:transferase activity; P:metabolic process	-

**Legend:** F: Molecular Function; P: Biological Process; C: Cellular Component; GO: Gene Ontology; SIM Mean: % of similitude; Seq Name: Sequence Name.