

Exploring MicroRNAs Associated with Pomegranate Pistil Development: An Identification and Analysis Study

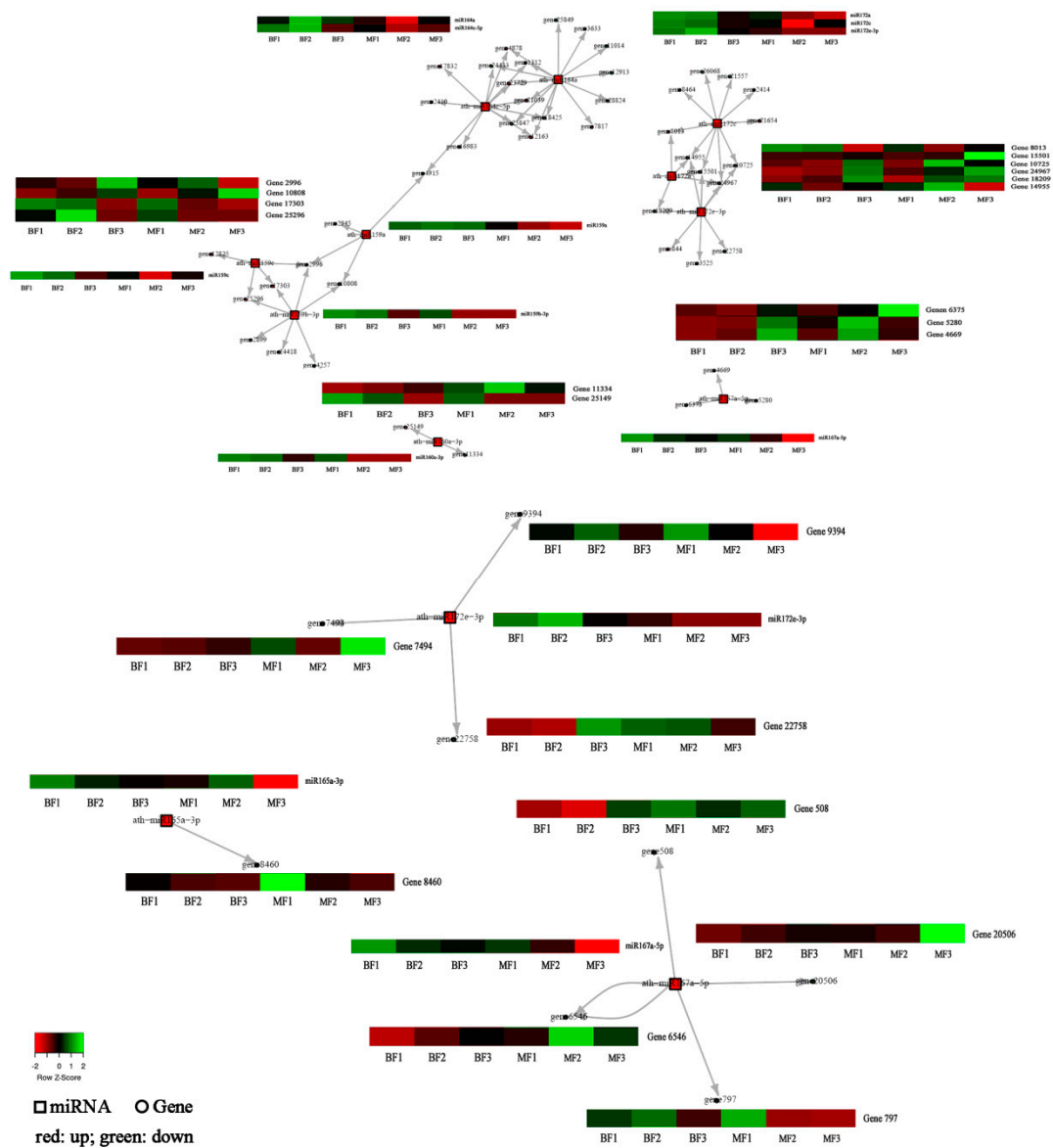
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Supplemental Figure S3. Analysis of the relationship between differentially expressed miRNAs and target genes.

Supplemental Table S1. The qRT-PCR primer of miRNAs

Primer	Primer sequence
miRNA172e	F: ctcaactggtgtcgtggagtcggcaattcagttgagatgcagca; R: acactccagctgggggaatcttgatgatg
miRNA160a	F: ctcaactggtgtcgtggagtcggcaattcagttgagtatgcatg; R: acactccagctggggcgtatgaggagcca
miRNA164c	F: ctcaactggtgtcgtggagtcggcaattcagttgagcgcacgtg; R: acactccagctgggtggagaagcagggca
miRNA167d	F: ctcaactggtgtcgtggagtcggcaattcagttgagccagatca; R: acactccagctgggtgaagctgccagcatg
miRNA159a	F: ctcaactggtgtcgtggagtcggcaattcagttgagtagagctc; R: acactccagctgggtttgattgaaggga
Novel 178	F: ctcaactggtgtcgtggagtcggcaattcagttgagctgacaac; R: acactccagctgggcgtccccaccaccgatgt
Novel 437	F: ctcaactggtgtcgtggagtcggcaattcagttgaggtgaata; R: acactccagctgggcccagccgcgattgaata
Novel 472	F: ctcaactggtgtcgtggagtcggcaattcagttgagcagctgtc; R: acactccagctgggaaccaaagaatttaaga
<i>PgActin</i>	F: agtcctcttcagccatctc; R: cactgagcacaatgtttcca

Supplemental Table S2. Molecular characteristics of partial Known and Novel miRNAs

miRNA family	miRNA	miRNA mature sequence	Length (nt)
miRNA156	miRNA156a	UGACAGAAGAGAGUGAGCAC	20
	miRNA156g	CGACAGAAGAGAGUGAGCAC	20
	miRNA156h	UGACAGAAGAAAGAGAGCAC	20
	miRNA156i	UGACAGAAGAGAGAGAGCAG	20
	miRNA156j	UGACAGAAGAGAGAGAGCAC	20
miRNA157	miRNA157a	UUGACAGAAGAUAGAGAGCAC	21
miRNA159	miRNA159a	UUUGGAUUGAAGGGAGCUCUA	21
	miRNA159b	UUUGGAUUGAAGGGAGCUCUU	21
	miRNA159c	UUUGGAUUGAAGGGAGCUCCU	21
miRNA160	miRNA160a-3p	GCGUAUGAGGAGCCAUGCAUA	21
	miRNA160a-5p	UGCCUGGCUCCCUGUAUGCCA	21
miRNA164	miRNA164a	UGGAGAAGCAGGGCACGUGCA	21
	miRNA164c	UGGAGAAGCAGGGCACGUGCG	21
miRNA165	miRNA165a-3p	UCGGACCAGGCUUCAUCCCCC	21
	miRNA165a-5p	GGAAUGUUGUCUGGAUCGAGG	21
miRNA166	miRNA166a-3p	UCGGACCAGGCUUCAUCCCCC	21
	miRNA166a-5p	GGACUGUUGUCUGGCUCGAGG	21
miRNA167	miRNA167a	UGAAGCUGCCAGCAUGAUCUA	21
	miRNA167c	UAAGCUGCCAGCAUGAUCUUG	21
	miRNA167d	UGAAGCUGCCAGCAUGAUCUGG	22
miRNA169	miRNA169b	CAGCCAAGGAUGACUUGCCGG	21
miRNA172	miRNA172a	AGAAUCUUGAUGAUGCUGCAU	21
	miRNA172c	AGAAUCUUGAUGAUGCUGCAG	21
	miRNA172e	GGAAUCUUGAUGAUGCUGCAU	21
Novel 41	Novel 41	AAAGUCUAAUAGAUCUACCUACC	24

Novel 95	Novel 95	AUGUCGUGCUAGAACUAAAAAUCU	24
Novel 111	Novel 111	AAUUUUAAACUCUGAAAUCAAACGC	24
Novel 178	Novel 178	CGUCCCCACCACCGAUGUUGUCAG	24
Novel 312	Novel 312	GGAAAAUUGAUGUCGUGCUAUGCC	24
Novel 391	Novel 391	CAGUCGACUGUGUUCAUUUGGUCU	24
Novel 437	Novel 437	CCGAGCCGCGAUUGAAUAUUCAGC	24
Novel 472	Novel 472	AACCAAAAGAAUUUAAGACACGUG	24

Supplemental Table S3. Information of partial miRNAs' target genes

miRNA ID	Target genes
miR156a-5p	gene11510, gene1341, gene9689, gene2311, gene26316, gene1095, gene2300, gene17534
miR157a-5p	gene9689, gene2300, gene10490, gene1341, gene2311, gene26316, gene1095, gene680
miR159a	gene1232, gene26786, gene3071, gene18113, gene10479, gene13326, gene6404, gene2996
miR160a	Gene4313, gene25750, gene4441, gene18010, gene25149, gene5993, gene5388, gene1194
miR164a	gene2909, gene26387, gene9517, gene3014, gene15484, gene5088, gene4244, gene4105
miR165a-3p	gene8460, gene7528, gene27930, gene712, gene27931, gene13434,
miR167a-5p	Gene6546, gene508, gene20506, gene797
miR172	gene8013, gene14955, gene15501, gene24967, gene10725
Novel 41	gene10099, gene5403
Novel 95	gene17833
Novel 111	gene6798, gene12900, gene10203, gene3421, gene20233, gene5397, gene10767, gene6293
Novel 178	gene8682
Novel 312	gene14490, gene15143, gene7285, gene1302, gene2113
Novel 391	gene18730, gene18730, gene4143, gene5423, gene15200, gene25267, gene5888
Novel 437	gene24538, gene5094
Novel 472	gene9921, gene21521, gene10433, gene12016

Note: miRNA ID represented microRNA names, target genes represented target genes name. Pomegranate gene IDs of target genes were shown in Supplemental Table 4.

Supplemental Table S4. Pomegranate differential expression genes annotation information

gene_id	log ₂ FoldChange	padj	gene_name	gene_chr
gene24899	-14.32288543	2.23818E-31	CDL15_Pgr002637	MTKT01005527.1
gene16721	-13.51383383	2.28501E-27	CDL15_Pgr021303	MTKT01003414.1
gene15567	-13.41755291	6.48172E-35	CDL15_Pgr009570	MTKT01003224.1
gene13767	-12.82955243	6.69673E-22	CDL15_Pgr018563	MTKT01002507.1
gene10570	-12.67835161	1.53948E-59	CDL15_Pgr007411	MTKT01002214.1
gene28004	-12.48115611	1.98547E-23	CDL15_Pgr006152	MTKT01005880.1
gene20395	-12.34768302	7.91297E-21	CDL15_Pgr011184	MTKT01004486.1
novel.719	-12.23717661	2.66753E-13	-	MTKT01002214.1
gene26833	-12.00355036	2.53299E-21	CDL15_Pgr028635	MTKT01005739.1
gene9970	-11.81974616	7.73085E-20	CDL15_Pgr006809	MTKT01002214.1
gene24906	-11.40974919	8.9267E-20	CDL15_Pgr002644	MTKT01005527.1

gene27420	-11.20141109	1.15588E-19	CDL15_Pgr010132	MTKT01005811.1
gene17637	-11.15940566	4.84575E-18	CDL15_Pgr008580	MTKT01003794.1
gene4463	-11.13649438	2.53526E-17	CDL15_Pgr010175	MTKT01000826.1
gene10293	-11.1111984	1.48023E-34	CDL15_Pgr007132	MTKT01002214.1
gene10050	-11.02103696	5.86235E-18	CDL15_Pgr006889	MTKT01002214.1
gene8133	-10.96741686	1.00099E-09	CDL15_Pgr009122	MTKT01001838.1
gene28270	-10.96343509	1.51175E-96	CDL15_Pgr026251	MTKT01005977.1
gene1187	-10.60911677	2.82918E-88	CDL15_Pgr014750	MTKT01000548.1
gene18082	-10.58022993	2.71024E-23	CDL15_Pgr026636	MTKT01003950.1
gene24876	-10.5211137	1.10037E-08	CDL15_Pgr002614	MTKT01005527.1
gene18078	-10.51964359	0	CDL15_Pgr026632	MTKT01003950.1
gene26733	-10.49438525	3.29429E-17	CDL15_Pgr028535	MTKT01005739.1
gene18529	-10.23032291	1.00101E-07	CDL15_Pgr001242	MTKT01003953.1
gene18647	-10.22521029	1.763E-174	CDL15_Pgr001360	MTKT01003953.1
gene2909	-10.20960058	2.47568E-13	CDL15_Pgr002300	MTKT01000790.1
novel.426	-10.16414972	8.85952E-16	-	MTKT01001276.1
gene6124	-10.0885307	6.70896E-16	CDL15_Pgr029154	MTKT01001158.1
gene21776	-10.05046617	1.03346E-22	CDL15_Pgr025831	MTKT01004810.1
gene17990	-9.999633037	1.04604E-14	CDL15_Pgr026544	MTKT01003950.1
gene23267	-9.971989691	6.89384E-83	CDL15_Pgr024617	MTKT01004967.1
gene20466	-9.958598932	1.50132E-49	CDL15_Pgr011255	MTKT01004486.1
gene1920	-9.957395608	3.3889E-15	CDL15_Pgr024137	MTKT01000666.1
gene23429	-9.920859621	7.07256E-30	CDL15_Pgr004790	MTKT01005034.1
gene703	-9.771874912	1.92279E-11	CDL15_Pgr023414	MTKT01000420.1
gene9882	-9.761750753	8.05057E-14	CDL15_Pgr006721	MTKT01002214.1
gene28980	-9.728083844	0.001290915	CDL15_Pgr020137	MTKT01006319.1
gene2721	-9.5082634	4.897E-162	CDL15_Pgr020761	MTKT01000785.1
gene17246	-9.46349295	3.10353E-12	CDL15_Pgr003973	MTKT01003769.1
gene8858	-9.459925993	2.05021E-12	CDL15_Pgr029194	MTKT01001946.1
gene24027	-9.414692507	1.88674E-12	CDL15_Pgr019205	MTKT01005376.1
gene19998	-9.404730509	1.3061E-30	CDL15_Pgr005609	MTKT01004399.1
novel.1876	-9.392873424	1.60781E-12	-	MTKT01005880.1
gene1182	-9.365091318	1.93059E-13	CDL15_Pgr014745	MTKT01000548.1
gene25197	-9.362904659	1.08103E-15	CDL15_Pgr013417	MTKT01005554.1
gene21871	-9.26549986	3.37456E-09	CDL15_Pgr025926	MTKT01004810.1
gene27384	-9.259126457	8.98204E-73	CDL15_Pgr020606	MTKT01005809.1
novel.1727	-9.246950217	3.20723E-13	-	MTKT01005569.1
novel.562	-9.233629273	3.11272E-13	-	MTKT01001935.1
gene671	-9.208549809	7.9047E-13	CDL15_Pgr023382	MTKT01000420.1
gene17730	-9.154415463	1.13914E-08	CDL15_Pgr022254	MTKT01003937.1
gene6355	-9.105212999	0	CDL15_Pgr027415	MTKT01001287.1
gene20618	-9.03039385	4.82148E-67	CDL15_Pgr011407	MTKT01004486.1
gene9028	-9.001599076	9.97165E-11	CDL15_Pgr001579	MTKT01002011.1
gene22506	-8.966392683	1.35117E-12	CDL15_Pgr024960	MTKT01004939.1

gene16658	-8.913341176	1.35498E-11	CDL15_Pgr021240	MTKT01003414.1
gene26706	-8.878464517	8.0869E-50	CDL15_Pgr028508	MTKT01005739.1
gene1186	-8.851694731	7.2481E-157	CDL15_Pgr014749	MTKT01000548.1
gene9543	-8.829362099	1.67426E-09	CDL15_Pgr002094	MTKT01002011.1
gene29022	-8.788454123	0.002935439	CDL15_Pgr020179	MTKT01006319.1
novel.1877	-8.787580854	2.38052E-10	-	MTKT01005880.1
gene26112	-8.696295169	2.84919E-08	CDL15_Pgr017157	MTKT01005569.1
gene27699	-8.6335635	4.63666E-73	CDL15_Pgr011527	MTKT01005817.1
gene19344	-8.632023656	2.59616E-51	CDL15_Pgr017794	MTKT01004293.1
gene17247	-8.601075263	2.56218E-10	CDL15_Pgr003974	MTKT01003769.1
gene387	-8.552074605	6.3777E-105	CDL15_Pgr000172	MTKT01000299.1
gene6627	-8.507774267	2.46649E-07	CDL15_Pgr027687	MTKT01001287.1
novel.344	-8.500357078	1.09303E-10	-	MTKT01001082.1
novel.1263	-8.425323399	5.21704E-09	-	MTKT01004026.1
gene26061	-8.41308672	1.0817E-100	CDL15_Pgr017106	MTKT01005569.1
gene3901	-8.369719615	2.07166E-61	CDL15_Pgr016410	MTKT01000807.1
gene14323	-8.33726281	3.06913E-09	CDL15_Pgr017033	MTKT01002534.1
gene10640	-8.320677649	7.14629E-10	CDL15_Pgr007481	MTKT01002214.1
gene7927	-8.311985135	1.24398E-09	CDL15_Pgr004282	MTKT01001810.1
gene10091	-8.283678244	1.29779E-23	CDL15_Pgr006930	MTKT01002214.1
novel.2046	-8.282468376	2.92594E-08	-	MTKT01006319.1
gene21970	-8.254913131	1.4325E-13	CDL15_Pgr026025	MTKT01004810.1
gene2874	-8.239833268	8.26547E-07	CDL15_Pgr020914	MTKT01000785.1
novel.1855	-8.224541469	2.08995E-06	-	MTKT01005815.1
gene1183	-8.218458976	1.94318E-10	CDL15_Pgr014746	MTKT01000548.1
novel.1440	-8.216814565	3.48822E-06	-	MTKT01004864.1
gene3748	-8.200601317	9.26732E-09	CDL15_Pgr000384	MTKT01000801.1
gene11779	-8.186041509	1.36589E-09	CDL15_Pgr006291	MTKT01002371.1
gene19618	-8.174658814	2.07452E-10	CDL15_Pgr018068	MTKT01004293.1
gene10857	-8.167185204	4.29051E-20	CDL15_Pgr007698	MTKT01002214.1
gene14738	-8.137299773	4.76513E-36	CDL15_Pgr011670	MTKT01002940.1
gene9027	-8.085043701	1.32123E-07	CDL15_Pgr001578	MTKT01002011.1
gene17963	-8.072840999	3.15659E-12	CDL15_Pgr026517	MTKT01003950.1
gene28766	-8.067138746	5.60499E-09	CDL15_Pgr019923	MTKT01006319.1
gene15354	-8.052870647	1.51122E-93	CDL15_Pgr028239	MTKT01003207.1
gene3161	-8.049677829	1.22223E-09	CDL15_Pgr012673	MTKT01000791.1
gene9692	-8.041882545	5.81619E-42	CDL15_Pgr002243	MTKT01002011.1
gene10450	-8.033275085	4.06611E-07	CDL15_Pgr007291	MTKT01002214.1
gene25922	-7.864990331	6.47113E-08	CDL15_Pgr015441	MTKT01005556.1
gene2928	-7.840964649	1.29813E-08	CDL15_Pgr002319	MTKT01000790.1
gene21113	-7.802443384	1.61263E-55	CDL15_Pgr014513	MTKT01004609.1
gene26387	-7.776597015	3.08283E-43	CDL15_Pgr008873	MTKT01005615.1
novel.2007	-7.756331349	2.06891E-12	-	MTKT01006319.1
gene25180	-7.738076778	1.63537E-14	CDL15_Pgr013400	MTKT01005554.1

novel.340	-7.737500419	3.33436E-07	-	MTKT01001080.1
novel.1955	-7.651017459	3.21734E-08	-	MTKT01006319.1
novel.2055	-7.63729678	2.40294E-07	-	MTKT01006319.1
gene24508	-7.578630621	9.59401E-37	CDL15_Pgr000576	MTKT01005400.1
gene27622	-7.560356005	3.19865E-07	CDL15_Pgr018846	MTKT01005815.1
novel.1800	-7.522590528	5.7342E-08	-	MTKT01005739.1
gene19440	-7.500018714	3.09019E-49	CDL15_Pgr017890	MTKT01004293.1
gene23557	-7.498221656	6.34456E-31	CDL15_Pgr016291	MTKT01005171.1
gene10258	-7.492346959	6.5696E-08	CDL15_Pgr007097	MTKT01002214.1
novel.754	-7.487532645	1.40649E-10	-	MTKT01002214.1
gene2411	-7.477503888	1.37985E-06	CDL15_Pgr010470	MTKT01000670.1
gene4783	-7.452406062	4.20914E-05	CDL15_Pgr015698	MTKT01001080.1
gene27419	-7.436017237	4.16499E-07	CDL15_Pgr010131	MTKT01005811.1
gene1181	-7.428591009	3.2986E-11	CDL15_Pgr014744	MTKT01000548.1
gene1940	-7.421656599	3.16877E-47	CDL15_Pgr024157	MTKT01000666.1
novel.961	-7.395011729	4.75522E-10	-	MTKT01002534.1
gene28003	-7.36959708	5.4932E-06	CDL15_Pgr006151	MTKT01005880.1
gene20540	-7.337872727	2.52358E-06	CDL15_Pgr011329	MTKT01004486.1
gene17075	-7.30743713	1.3434E-235	CDL15_Pgr005110	MTKT01003711.1
gene17426	-7.30559601	3.34075E-06	CDL15_Pgr008369	MTKT01003794.1
gene19717	-7.298542864	5.80934E-07	CDL15_Pgr018167	MTKT01004293.1
gene3565	-7.284308952	0.000951069	CDL15_Pgr016609	MTKT01000799.1
gene2257	-7.250859446	7.93822E-24	CDL15_Pgr024474	MTKT01000666.1
gene10623	-7.24701373	6.47522E-42	CDL15_Pgr007464	MTKT01002214.1
gene27679	-7.226654295	5.76415E-08	CDL15_Pgr011507	MTKT01005817.1
gene24287	-7.22602831	4.97962E-07	CDL15_Pgr028430	MTKT01005384.1
gene11707	-7.220543227	2.68973E-37	CDL15_Pgr010093	MTKT01002370.1
novel.1312	-7.211709118	4.45914E-07	-	MTKT01004293.1
gene10107	-7.139805605	1.83399E-50	CDL15_Pgr006946	MTKT01002214.1
gene2314	-7.13466132	2.22027E-47	CDL15_Pgr024531	MTKT01000666.1
novel.112	-7.131903772	1.48568E-06	-	MTKT01000548.1
gene5059	-7.117672793	4.08924E-28	CDL15_Pgr015974	MTKT01001080.1
gene8299	-7.110577296	5.24657E-76	CDL15_Pgr012840	MTKT01001932.1
gene23518	-7.109819934	2.43076E-08	CDL15_Pgr004879	MTKT01005034.1
gene25114	-7.061780452	2.39927E-18	CDL15_Pgr010431	MTKT01005538.1
novel.259	-7.059065439	4.72953E-05	-	MTKT01000807.1
gene8298	-7.057360751	5.12291E-70	CDL15_Pgr012839	MTKT01001932.1
gene12885	-7.056381115	0.000884903	CDL15_Pgr003291	MTKT01002492.1
gene13845	-7.053825763	2.08832E-06	CDL15_Pgr018641	MTKT01002507.1
gene26963	-7.043534873	5.18932E-08	CDL15_Pgr028765	MTKT01005739.1
gene22109	-7.019973421	3.6744E-30	CDL15_Pgr013872	MTKT01004864.1
gene17532	-7.012216973	6.11646E-17	CDL15_Pgr008475	MTKT01003794.1
gene4462	-7.008381237	4.87447E-07	CDL15_Pgr010174	MTKT01000826.1
gene673	-6.99805028	0.000977741	CDL15_Pgr023384	MTKT01000420.1

gene11626	-6.979336963	1.15655E-06	CDL15_Pgr010012	MTKT01002370.1
gene491	-6.979066491	3.59627E-96	CDL15_Pgr000276	MTKT01000299.1
gene704	-6.973056684	1.75874E-05	CDL15_Pgr019246	MTKT01000429.1
gene24485	-6.965570925	1.06926E-05	CDL15_Pgr000553	MTKT01005400.1
gene20405	-6.945263344	4.86086E-06	CDL15_Pgr011194	MTKT01004486.1
gene2064	-6.889445046	2.09956E-17	CDL15_Pgr024281	MTKT01000666.1
gene13933	-6.887294526	5.2417E-06	CDL15_Pgr012406	MTKT01002520.1
gene22152	-6.872372655	1.08946E-07	CDL15_Pgr013915	MTKT01004864.1
gene21619	-6.858819754	1.90413E-06	CDL15_Pgr025674	MTKT01004810.1
gene18115	-6.857973749	4.23937E-16	CDL15_Pgr026669	MTKT01003950.1
gene2846	-6.845260806	2.29465E-11	CDL15_Pgr020886	MTKT01000785.1
novel.876	-6.839414477	3.44922E-06	-	MTKT01002492.1
gene8464	-6.835532889	2.85503E-06	CDL15_Pgr013005	MTKT01001932.1
gene24509	-6.786937398	1.48856E-06	CDL15_Pgr000577	MTKT01005400.1
gene1643	-6.773493943	1.76139E-61	CDL15_Pgr026945	MTKT01000605.1
gene4357	-6.770801093	6.86446E-49	CDL15_Pgr022744	MTKT01000813.1
gene13950	-6.770587686	2.88764E-17	CDL15_Pgr012423	MTKT01002520.1
gene3145	-6.765822643	4.36072E-37	CDL15_Pgr002536	MTKT01000790.1
gene18655	-6.739052063	2.40861E-11	CDL15_Pgr001368	MTKT01003953.1
gene12182	-6.720756975	3.36036E-06	CDL15_Pgr023130	MTKT01002440.1
gene14455	-6.705227044	1.89728E-07	CDL15_Pgr028893	MTKT01002590.1
gene18818	-6.67473528	1.7144E-06	CDL15_Pgr016545	MTKT01003957.1
gene15929	-6.672903398	0.001516661	CDL15_Pgr009932	MTKT01003224.1
gene4343	-6.660112236	3.74818E-14	CDL15_Pgr022730	MTKT01000813.1
gene15355	-6.651550967	0.000196325	CDL15_Pgr028240	MTKT01003207.1
novel.933	-6.646702548	5.06831E-06	-	MTKT01002507.1
novel.1848	-6.646546547	5.23815E-05	-	MTKT01005815.1
gene22156	-6.619190104	1.53476E-05	CDL15_Pgr013919	MTKT01004864.1
gene16458	-6.604747232	1.0227E-12	CDL15_Pgr023724	MTKT01003389.1
gene3747	-6.596372467	8.93169E-05	CDL15_Pgr000383	MTKT01000801.1
novel.100	-6.588401343	1.61521E-52	-	MTKT01000548.1
gene12984	-6.571677253	1.95514E-96	CDL15_Pgr003390	MTKT01002492.1
gene3902	-6.538194079	6.8226E-32	CDL15_Pgr016411	MTKT01000807.1
gene11420	-6.535181655	2.18221E-30	CDL15_Pgr019786	MTKT01002229.1
gene9132	-6.434159581	5.69969E-06	CDL15_Pgr001683	MTKT01002011.1
gene9206	-6.424090264	3.61253E-16	CDL15_Pgr001757	MTKT01002011.1
gene3945	-6.403121671	3.00546E-05	CDL15_Pgr016454	MTKT01000807.1
gene28357	-6.38927025	1.39012E-50	CDL15_Pgr022065	MTKT01006103.1
gene20610	-6.38528231	9.10061E-05	CDL15_Pgr011399	MTKT01004486.1
gene12778	-6.377538684	0.001657535	CDL15_Pgr003184	MTKT01002492.1
gene4786	-6.373760069	0.006261596	CDL15_Pgr015701	MTKT01001080.1
gene28336	-6.366803892	5.66452E-24	CDL15_Pgr022044	MTKT01006103.1
gene8613	-6.363264855	1.61281E-06	CDL15_Pgr011855	MTKT01001935.1
gene21182	-6.345861711	2.35293E-89	CDL15_Pgr014582	MTKT01004609.1

novel.374	-6.331499447	5.61505E-05	-	MTKT01001094.1
gene10624	-6.316931821	5.20833E-05	CDL15_Pgr007465	MTKT01002214.1
gene19529	-6.31677419	3.60887E-25	CDL15_Pgr017979	MTKT01004293.1
gene20678	-6.311272422	3.4115E-183	CDL15_Pgr011467	MTKT01004486.1
gene10108	-6.257874465	0.000216636	CDL15_Pgr006947	MTKT01002214.1
novel.383	-6.240946472	6.55145E-34	-	MTKT01001111.1
gene4051	-6.215292195	4.69834E-31	CDL15_Pgr022438	MTKT01000813.1
gene2209	-6.21282632	1.78756E-06	CDL15_Pgr024426	MTKT01000666.1
gene12535	-6.203377202	0.000185487	CDL15_Pgr002941	MTKT01002492.1
gene25079	-6.190259838	1.38936E-08	CDL15_Pgr010396	MTKT01005538.1
gene20537	-6.184433555	8.2552E-108	CDL15_Pgr011326	MTKT01004486.1
gene24675	-6.18272381	7.18994E-08	CDL15_Pgr000743	MTKT01005400.1
gene6906	-6.172830998	7.84726E-28	CDL15_Pgr027966	MTKT01001287.1
gene1192	-6.169284037	0.000106898	CDL15_Pgr014755	MTKT01000548.1
gene6663	-6.145791734	5.49243E-07	CDL15_Pgr027723	MTKT01001287.1
gene670	-6.144880415	0.00053724	CDL15_Pgr023381	MTKT01000420.1
gene5285	-6.124004381	1.71104E-06	hypothetical_protein	MTKT01001084.1
gene26115	-6.114150278	3.05625E-14	CDL15_Pgr017160	MTKT01005569.1
gene13032	-6.107759919	2.2335E-67	CDL15_Pgr003438	MTKT01002492.1
gene28198	-6.101846965	1.35813E-83	CDL15_Pgr019459	MTKT01005965.1
gene1900	-6.089326076	1.72748E-32	CDL15_Pgr024117	MTKT01000666.1
gene1729	-6.085740496	0.000133184	CDL15_Pgr012562	MTKT01000661.1
gene1964	-6.085638385	0.000267743	CDL15_Pgr024181	MTKT01000666.1
gene23424	-6.062506743	1.71249E-08	CDL15_Pgr004785	MTKT01005034.1
gene14160	-6.059183415	0.000115822	CDL15_Pgr016870	MTKT01002534.1
gene9966	-6.058226648	2.86148E-26	CDL15_Pgr006805	MTKT01002214.1
gene10315	-6.057555976	7.60615E-10	CDL15_Pgr007154	MTKT01002214.1
gene4363	-6.032307136	0.000108196	CDL15_Pgr022750	MTKT01000813.1
gene6981	-6.019362983	0.000626557	CDL15_Pgr028041	MTKT01001287.1
gene10737	-6.019289202	1.68569E-11	CDL15_Pgr007578	MTKT01002214.1
gene24118	-6.016758867	0.001474829	CDL15_Pgr024711	MTKT01005379.1
gene18204	-5.994822791	0.000407118	hypothetical_protein	MTKT01003950.1
novel.1498	-5.992458275	0.000153795	-	MTKT01004950.1
gene2788	-5.984052687	0.000911888	CDL15_Pgr020828	MTKT01000785.1
gene27395	-5.961750921	0.005648311	CDL15_Pgr020617	MTKT01005809.1
gene9701	-5.956610562	0.001006367	CDL15_Pgr002252	MTKT01002011.1
gene24714	-5.949990314	0.000181495	CDL15_Pgr000782	MTKT01005400.1
novel.887	-5.947640416	1.42696E-21	-	MTKT01002492.1
gene16163	-5.937530453	2.91554E-74	CDL15_Pgr021740	MTKT01003240.1
gene10203	-5.935718647	5.90857E-07	CDL15_Pgr007042	MTKT01002214.1
novel.173	-5.934368035	0.003868674	-	MTKT01000670.1
novel.350	-5.93219255	6.07227E-05	-	MTKT01001084.1
gene17236	-5.896350059	8.52997E-28	CDL15_Pgr003963	MTKT01003769.1
gene20541	-5.886856237	5.21822E-05	CDL15_Pgr011330	MTKT01004486.1

gene17994	-5.886735723	6.61117E-16	CDL15_Pgr026548	MTKT01003950.1
gene18692	-5.88568338	3.91499E-08	CDL15_Pgr001405	MTKT01003953.1
gene12463	-5.881624142	0.000266991	CDL15_Pgr002869	MTKT01002492.1
gene513	-5.861668462	9.24798E-13	CDL15_Pgr000298	MTKT01000299.1
novel.1397	-5.851648159	7.16978E-10	-	MTKT01004693.1
gene19655	-5.8296064	0.001020648	CDL15_Pgr018105	MTKT01004293.1
novel.637	-5.825682127	0.00038867	-	MTKT01001946.1
gene6777	-5.800156692	4.83268E-05	CDL15_Pgr027837	MTKT01001287.1
gene19810	-5.79405932	1.6918E-254	CDL15_Pgr018260	MTKT01004293.1
gene23844	-5.791319391	0.000497511	CDL15_Pgr010761	MTKT01005370.1
gene12094	-5.770899264	2.14401E-81	CDL15_Pgr023042	MTKT01002440.1
gene12236	-5.765544361	0.000741351	CDL15_Pgr023184	MTKT01002440.1
gene7102	-5.757363691	0.002367808	CDL15_Pgr014176	MTKT01001322.1
gene12189	-5.754209294	4.85915E-66	CDL15_Pgr023137	MTKT01002440.1
gene16870	-5.752316813	3.51237E-34	CDL15_Pgr004532	MTKT01003433.1
gene8474	-5.738503887	0.000853257	CDL15_Pgr013015	MTKT01001932.1
gene17544	-5.736629951	7.18845E-05	CDL15_Pgr008487	MTKT01003794.1
gene22012	-5.729004887	0.009577073	CDL15_Pgr026067	MTKT01004810.1
gene16821	-5.723689926	0.000557857	CDL15_Pgr021403	MTKT01003414.1
gene6524	-5.699036395	2.04358E-16	CDL15_Pgr027584	MTKT01001287.1
novel.1081	-5.689120663	6.96959E-15	-	MTKT01003224.1
gene11279	-5.683237657	5.96858E-10	CDL15_Pgr019645	MTKT01002229.1
gene1963	-5.68143564	0.003514556	CDL15_Pgr024180	MTKT01000666.1
novel.1159	-5.664609418	2.49669E-09	-	MTKT01003711.1
gene22817	-5.657771481	0.005722971	CDL15_Pgr025271	MTKT01004939.1
gene11328	-5.647221946	2.3643E-19	CDL15_Pgr019694	MTKT01002229.1
gene26892	-5.644613102	0.000702467	CDL15_Pgr028694	MTKT01005739.1
gene10697	-5.637878486	1.32435E-11	CDL15_Pgr007538	MTKT01002214.1
gene6545	-5.620405523	0.001325075	CDL15_Pgr027605	MTKT01001287.1
gene22081	-5.617665178	0.003834417	CDL15_Pgr026136	MTKT01004810.1
gene21479	-5.609568696	5.80641E-06	CDL15_Pgr025534	MTKT01004810.1
gene16162	-5.607558305	0.00205604	CDL15_Pgr021739	MTKT01003240.1
gene27820	-5.598642475	0.00740419	CDL15_Pgr024771	MTKT01005852.1
gene5573	-5.59359581	1.55318E-21	CDL15_Pgr011093	MTKT01001090.1
gene8478	-5.567156505	0.008400205	CDL15_Pgr013019	MTKT01001932.1
gene21966	-5.563542691	4.06809E-41	CDL15_Pgr026021	MTKT01004810.1
gene15457	-5.521780616	1.69531E-50	CDL15_Pgr009460	MTKT01003224.1
gene10881	-5.502761479	0.00033961	CDL15_Pgr007722	MTKT01002214.1
gene10313	-5.49867036	0.000571721	CDL15_Pgr007152	MTKT01002214.1
gene7410	-5.494520733	5.49673E-05	CDL15_Pgr027112	MTKT01001633.1
gene18206	-5.491950196	0.004285678	CDL15_Pgr026760	MTKT01003950.1
gene14189	-5.487837936	7.13018E-10	CDL15_Pgr016899	MTKT01002534.1
novel.1612	-5.487385182	0.002305891	-	MTKT01005400.1
gene2682	-5.48285046	4.39716E-49	CDL15_Pgr024010	MTKT01000773.1

gene24900	-5.48026296	1.48479E-31	CDL15_Pgr002638	MTKT01005527.1
gene18726	-5.471561013	0.000145298	CDL15_Pgr001439	MTKT01003953.1
gene19522	-5.470595117	0.000125231	CDL15_Pgr017972	MTKT01004293.1
gene6056	-5.467953514	0.002259206	CDL15_Pgr029086	MTKT01001158.1
gene1422	-5.463250263	0.005048597	CDL15_Pgr006439	MTKT01000553.1
gene25769	-5.454008516	1.07827E-13	CDL15_Pgr015288	MTKT01005556.1
gene2326	-5.451563069	0.00192074	CDL15_Pgr024543	MTKT01000666.1
gene25286	-5.4409595	2.53731E-78	CDL15_Pgr013506	MTKT01005554.1
gene16277	-5.439809074	5.99954E-13	CDL15_Pgr021854	MTKT01003240.1
gene9967	-5.436819425	0.005121595	CDL15_Pgr006806	MTKT01002214.1
gene4035	-5.434626726	0.000620371	CDL15_Pgr022420	MTKT01000813.1
gene15508	-5.428590802	0.006257348	CDL15_Pgr009511	MTKT01003224.1
gene21546	-5.396964062	2.69124E-24	CDL15_Pgr025601	MTKT01004810.1
gene27556	-5.390105449	4.12853E-35	CDL15_Pgr018780	MTKT01005815.1
gene18506	-5.381163048	2.44155E-33	CDL15_Pgr001219	MTKT01003953.1
gene23412	-5.364025401	0.004609298	CDL15_Pgr004773	MTKT01005034.1
gene22681	-5.358130141	2.1972E-40	CDL15_Pgr025135	MTKT01004939.1
gene11595	-5.341372298	6.14371E-18	CDL15_Pgr009981	MTKT01002370.1
gene10725	-5.338650223	3.58546E-10	CDL15_Pgr007566	MTKT01002214.1
novel.1433	-5.331362744	0.000527205	-	MTKT01004810.1
gene19574	-5.329427692	7.91381E-09	CDL15_Pgr018024	MTKT01004293.1
gene26910	-5.316024222	1.21566E-28	CDL15_Pgr028712	MTKT01005739.1
gene24109	-5.308861189	9.85999E-22	CDL15_Pgr024702	MTKT01005379.1
gene4118	-5.30127967	8.47837E-19	CDL15_Pgr022505	MTKT01000813.1
gene13150	-5.296917882	0.000101706	CDL15_Pgr003556	MTKT01002492.1
gene10138	-5.289874292	1.14936E-28	CDL15_Pgr006977	MTKT01002214.1
gene19718	-5.289705563	5.3488E-130	CDL15_Pgr018168	MTKT01004293.1
gene20329	-5.289176409	9.09926E-60	CDL15_Pgr005940	MTKT01004399.1
gene25101	-5.275258277	0.000800454	CDL15_Pgr010418	MTKT01005538.1
gene22979	-5.268092184	0.007324403	CDL15_Pgr025433	MTKT01004939.1
gene15469	-5.264294096	0.002926177	CDL15_Pgr009472	MTKT01003224.1
novel.1546	-5.255884038	0.00052372	-	MTKT01005370.1
gene9134	-5.251399345	1.9727E-120	CDL15_Pgr001685	MTKT01002011.1
gene4355	-5.249643935	1.71514E-56	CDL15_Pgr022742	MTKT01000813.1
gene27747	-5.24589809	6.55169E-18	CDL15_Pgr006396	MTKT01005821.1
gene18414	-5.22889205	4.07705E-07	CDL15_Pgr001127	MTKT01003953.1
gene11697	-5.224419769	1.22847E-07	CDL15_Pgr010083	MTKT01002370.1
novel.1852	-5.20980133	0.005948474	-	MTKT01005815.1
novel.645	-5.200340777	5.4339E-25	-	MTKT01002011.1
gene23883	-5.192326414	0.004824871	CDL15_Pgr010800	MTKT01005370.1
novel.175	-5.187677377	0.004228289	-	MTKT01000670.1
gene27417	-5.185263455	0.004814282	CDL15_Pgr010129	MTKT01005811.1
gene18197	-5.17154416	1.446E-06	CDL15_Pgr026751	MTKT01003950.1
gene6107	-5.167891299	1.15752E-14	CDL15_Pgr029137	MTKT01001158.1

gene2799	-5.161420976	0.000431096	CDL15_Pgr020839	MTKT01000785.1
gene5931	-5.145316463	0.00276368	CDL15_Pgr023696	MTKT01001132.1
gene8369	-5.144023941	0.000380924	CDL15_Pgr012910	MTKT01001932.1
gene3329	-5.143476224	1.6113E-109	CDL15_Pgr003694	MTKT01000797.1
gene27680	-5.142880601	1.12212E-14	CDL15_Pgr011508	MTKT01005817.1
gene1911	-5.14015177	2.08948E-42	CDL15_Pgr024128	MTKT01000666.1
gene25774	-5.139728847	2.09152E-06	CDL15_Pgr015293	MTKT01005556.1
gene12316	-5.139044521	1.07656E-46	hypothetical_protein	MTKT01002440.1
gene7630	-5.134294528	5.3594E-255	CDL15_Pgr009355	MTKT01001802.1
gene4686	-5.117166633	5.73682E-20	CDL15_Pgr015601	MTKT01001080.1
gene27455	-5.11676308	7.1466E-24	CDL15_Pgr018679	MTKT01005815.1
gene29218	-5.113980479	3.8236E-53	hypothetical_protein	MTKT01017349.1
gene28148	-5.112665805	0.004958286	CDL15_Pgr008232	MTKT01005898.1
gene13035	-5.106431974	0.002911756	CDL15_Pgr003441	MTKT01002492.1
gene24877	-5.100557235	0.005885281	CDL15_Pgr002615	MTKT01005527.1
gene26125	-5.099309097	0.005694473	CDL15_Pgr017170	MTKT01005569.1
gene2347	-5.086066883	1.30624E-43	hypothetical_protein	MTKT01000666.1
gene18092	-5.073003372	1.61553E-15	CDL15_Pgr026646	MTKT01003950.1
gene26609	-5.059167201	1.99021E-18	CDL15_Pgr009095	MTKT01005615.1
gene20085	-5.054714729	4.84375E-76	CDL15_Pgr005696	MTKT01004399.1
gene4161	-5.054218539	2.52063E-08	CDL15_Pgr022548	MTKT01000813.1
gene21179	-5.044719324	0.003077871	CDL15_Pgr014579	MTKT01004609.1
gene3542	-5.040649969	8.50204E-98	CDL15_Pgr016586	MTKT01000799.1
gene1465	-5.034657352	0.000204167	CDL15_Pgr006482	MTKT01000553.1
gene6416	-5.03361535	0.007551529	CDL15_Pgr027476	MTKT01001287.1
gene5187	-5.028475797	0.009251609	CDL15_Pgr026380	MTKT01001082.1
gene14388	-5.027000291	0.001947407	CDL15_Pgr028826	MTKT01002590.1
gene24026	-5.022162807	2.4378E-48	CDL15_Pgr019204	MTKT01005376.1
gene5496	-5.021568208	1.2133E-05	CDL15_Pgr011016	MTKT01001090.1
gene273	-5.020818738	0.006996577	CDL15_Pgr017404	MTKT01000281.1
gene15781	-5.020148776	1.48783E-49	CDL15_Pgr009784	MTKT01003224.1
gene21467	-5.007601725	0.009528137	CDL15_Pgr025522	MTKT01004810.1