

Supplementary Material

belonging to:

Fire blight disease reactome: RNA-seq transcriptional profile of apple host plant defense responses to *Erwinia amylovora* pathogen infection

Tim Kamber, Jan P. Buchmann, Joël F. Pothier, Theo H.M. Smits, Thomas Wicker & Brion Duffy

Supplemental table 1: Descriptions of the significantly differentially expressed *M. x domestica* transcripts in response to fire blight infection.

Supplemental table 2: BLASTx results of the significantly differentially expressed novel ORFs in *M. x domestica* in response to fire blight infection.

Supplemental table 3: BLASTx results of all expressed (non-significant) novel ORFs in *M. x domestica*.

Supplementary Table 1 Descriptions of the significantly differentially expressed *M. x domestica* transcripts in response to fire blight infection.

<i>M. x domestica</i> accession	<i>M. x domestica</i> locus	log ₂ (fold change)	<i>A. thaliana</i> accession	Name	Description
MDP000075648	MDC000011.378:18806-16970	1.79769e+308	AT5G46630.1		Claithrin adaptor complexes medium subunit family protein
MDP000026805	MDC000020.209:8435-13377	-4.53718	AT1G23990.1		Protein of unknown function, DUF642
0	MDC000127.652:4251-4037	1.79769e+308	AT4G32370.1		CAMP (CAMP-rich secretory proteins, Antigen 5, and Pathogenesis-related 1 protein) superfamily protein
MDP0000163276	MDC000130.277:7155-7601	2.19171	AT5G43380.1	TOPP6	type one serine/threonine protein phosphatase 6
MDP0000659818	MDC000144.408:251-3627	1.79769e+308	AT2G39200.1	ATMLO12,MLO12	Seven transmembrane MLO family protein
MDP0000417927	MDC000149.326:14929-15724	-1.93472	AT2G34430.1	LHB1B1,LHCB1.4	light-harvesting chlorophyll-protein complex II subunit B1
MDP0000417929	MDC000149.326:17749-18547	-1.87154	AT2G34430.1	LHB1B1,LHCB1.4	light-harvesting chlorophyll-protein complex II subunit B1
MDP0000251575	MDC000149.357:271-1869	-1.87058	AT2G34430.1	LHB1B1,LHCB1.4	light-harvesting chlorophyll-protein complex II subunit B1
MDP0000251575	MDC000149.357:3094-3889	-1.80257	AT2G34430.1	LHB1B1,LHCB1.4	light-harvesting chlorophyll-protein complex II subunit B1
MDP0000265831	MDC000164.370:18851-32386	2.71647	AT5G41770.1		crooked neck protein, putative / cell cycle protein, putative
MDP0000161380	MDC000178.398:6450-13590	1.79769e+308	AT5G19485.1		transferases,nucleotidyltransferases
MDP0000256732	MDC00021.1.300:6961-7241	1.79769e+308	AT2G18290.1	APC10	anaphase promoting complex 10
MDP0000255157	MDC000270.326:10391-13689	1.79769e+308	AT4G21430.1	B160	Zinc finger, RING-type;Transcription factor Ijumoni/ispaspartyl beta-hydroxylase
0	MDC000319.348:8176-8367	-2.48801			
MDP0000265100	MDC000357.185:21423-36365	2.72442	AT5G23760.1		Copper transport protein family
MDP0000264101	MDC000368.238:2725-8711	1.79769e+308	AT4G05410.1	YAO	Transducin/WD40 repeat-like superfamily protein
0	MDC000416.247:30134-30295	1.79769e+308			
0	MDC000446.497:2813-3451	2.36105	AT3G19815.1		unknown protein
0	MDC000455.144:3026-3468	3.21257	AT4G24620.1	PGI1, PGI	phosphoglucose isomerase 1
MDP0000323652	MDC000503.259:1794-2875	2.4077			
MDP0000263664	MDC000567.258:7588-8550	-2.52714	AT4G25040.1		Uncharacterised protein family (UPF0497)
MDP0000309167	MDC000600.439:7351-10850	1.79769e+308	AT2G45220.1		Plant invertase/spectrin methyltransferase inhibitor superfamily
MDP0000134686	MDC000618.305:5859-5889	1.79769e+308	AT1G62300.1		Tetratricopeptide repeat (TPR)-like superfamily protein
MDP0000146621	MDC000636.590:1152-4139	1.79769e+308	AT5G20080.1		FAD/NAD(P)-binding oxidoreductase
MDP0000413403	MDC000636.613:20700-20894	1.79769e+308	AT1G80160.1		Lactoylglutathione lyase / glyoxalase I family protein
MDP0000256199	MDC000662.202:27328-27666	1.79769e+308	AT3G63440.1	ATCKX6,ATCKX7,CKX6	cytokinin oxidase/dehydrogenase 6
MDP0000268130	MDC000665.201:7077-7269	1.79769e+308	AT1G50960.1		RNA-binding KH domain-containing protein
MDP0000262910	MDC000703.400:1546-15862	1.79769e+308	AT3G63440.1		dehydratase family
MDP0000253454	MDC000704.27:983-1106	1.79769e+308	AT5G47202.2		Thioesterase family protein
0	MDC000706.497:11518-11660	1.79769e+308			
MDP0000903417	MDC000706.499:3489-5017	1.79769e+308	AT1G61560.1	ATMLO6,MLO6	Seven transmembrane MLO family protein
MDP0000119183	MDC000707.178:3071-3361	1.79769e+308	AT5G13330.1		FtsJ-like methyltransferase family protein
MDP0000757070	MDC000711.381:8991-9419	-2.27797	AT5G38760.1		Late embryogenesis abundant protein (LEA) family protein
MDP0000119262	MDC000769.371:851-2301	1.70216	AT3G26430.1		GDSL-like Lipase/Acylhydrolase superfamily protein
MDP0000256865	MDC000791.288:5104-7135	1.79769e+308	AT4G10490.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000265644	MDC000810.342:26666-27910	1.79769e+308	AT1G52800.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000254592	MDC000841.262:2491-1127	4.28911	AT2G29260.1	ATBCB,BCB,SAG14	blue-copper-binding protein
MDP0000268271	MDC000866.255:10198-10455	1.79769e+308	AT1G31930.1	XLG3	extra-large GTP-binding protein 3
MDP0000264034	MDC000886.330:32493-36293	1.79769e+308	AT4G03180.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000503940	MDC000913.267:2796-29046	2.37597	AT3G11180.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000361449	MDC000929.184:1888-3055	-3.06288	UGT88A1	UGT88A1	UDP-glucosyl transferase 88A1
MDP0000252862	MDC000929.235:4941-5369	-3.05027	UGT88A1	UGT88A1	UDP-glucosyl transferase 88A1
MDP0000466313	MDC001071.282:1928-19513	1.79769e+308	AT3G10760.1		Homeodomain-like superfamily protein
MDP0000134250	MDC001204.784:1228-4995	-1.79053	AT1G53280.1		Class I glutamine amidotransferase-like superfamily protein
MDP0000083538	MDC001240.396:9691-9990	1.79769e+308	AT3G03940.1		Protein kinase family protein
MDP0000159558	MDC001261.116:13685-20797	1.79769e+308	AT4G32160.1		Phox (PX) domain-containing protein
MDP0000255913	MDC001262.249:1127-4423	1.96231	FP51	FP51	farnesyl diphosphate synthase 1
MDP0000445218	MDC001273.205:845-1730	1.79769e+308	AT1G02680.1	TA1F3	TBP-associated factor 13
MDP0000235782	MDC001276.321:32854-33398	1.79769e+308	AT4G18160.1	ATKCO6,ATTPK6,KCO6,TPK3	Ca ²⁺ activated outward rectifying K ⁺ channel 6
MDP0000119600	MDC001284.344:1341-1621	1.79769e+308	AT2G45760.1	BALBAP2	BON association protein 2
0	MDC001441.272:13692-14163	1.79769e+308	AT5G43920.1		transducin family protein / WD-40 repeat family protein
0	MDC001471.424:8307-83619	1.79769e+308	AT2G29260.1		NAD(P)-binding Rossmann-fold superfamily protein
MDP0000527355	MDC001500.115:2484-4397	-1.88554	AT1G0850.1	ATCTL1,CTL1,ELP,ELP1,ERH2	Chitinase family protein
MDP0000706016	MDC001647.167:31621-31880	1.79769e+308	AT1G32360.1		Zinc finger (CCHC-type) family protein
MDP0000498524	MDC001659.508:3688-13621	1.79769e+308	AT1G22380.1	AUGT85A3,UGT85A3	UDP-glucosyl transferase 85A3
0	MDC001671.165:2805-2973	1.79769e+308	AT1G78380.1	ATGSTU19, GST8, GSTU19	glutathione S-transferase TAU 19
MDP0000496027	MDC001715.358:1472-1911	1.79769e+308	AT4G36220.1	CYP84A1,FAH1	farnic acid 5-hydroxylase 1
MDP0000268417	MDC001733.221:3341-3606	1.79769e+308	AT3G59200.1		F-box/RN1-like superfamily protein
MDP0000163727	MDC001753.378:36916-37587	1.79769e+308	AT2G15780.1		Cupredoxin superfamily protein
MDP0000159000	MDC001757.664:1294-3548	3.69176	AT3G11180.2		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000576922	MDC001757.678:208-6183	4.517	AT2G36950.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000349381	MDC001781.94:3475-6197	1.79769e+308	AT1G28120.1		
MDP0000877084	MDC001787.334:3408-3753	1.79769e+308			
MDP0000265806	MDC001831.292:8893-9169	2.3957			
MDP0000588582	MDC001839.110:1393-3069	-2.34333	AT1G68220.1		Protein of unknown function (DUF1218)
MDP0000264961	MDC001845.296:622-3441	1.79769e+308	AT5G26885.1		RING-U-box superfamily protein
MDP0000538338	MDC001848.381:1941-3243	1.79769e+308	MLP423	MLP423	MLP-like protein 423
MDP0000835158	MDC001848.391:1325-1805	5.13328	MLP423	MLP423	MLP-like protein 423
MDP0000835159	MDC001848.391:5087-5567	4.99847	MLP423	MLP423	MLP-like protein 423
0	MDC001867.380:3629-3727	1.79769e+308			
0	MDC001930.226:2272-2436	-2.04989			
MDP0000607969	MDC001963.417:459-4217	2.78388	AT4G27250.1		NAD(P)-binding Rossmann-fold superfamily protein
0	MDC001963.417:4816-4925	1.79769e+308	AT4G27250.2		NAD(P)-binding Rossmann-fold superfamily protein
MDP0000025413	MDC001972.273:3026-9072	2.43751	AT5G27450.1	MK,MVK	mevalonate kinase
MDP0000844719	MDC001977.912:3360-3668	1.79769e+308			
MDP0000267282	MDC001999.948:8959-9311	1.79769e+308	AT1G80400.1		RING-U-box superfamily protein
MDP0000462572	MDC002001.729:20293-31469	1.71184	AT3G53990.1		Adenine nucleotide alpha hydrolases-like superfamily protein
0	MDC002052.246:9559-9831	1.79769e+308			
MDP0000829170	MDC002090.143:3807-5483	1.79769e+308	AT5G19440.1		NAD(P)-binding Rossmann-fold superfamily protein
MDP0000873573	MDC002124.224:10772-12083	3.23587	AT5G51970.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000515106	MDC002124.224:5559-6883	2.49012	AT2G22300.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000707567	MDC002124.226:5571-6882	2.42596	AT5G51970.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000120175	MDC002136.624:799-1408	1.79769e+308	AT1G68760.1	ATNUDT1,ATNUDX1,NUDX1	nucleix zinc-binding 1
0	MDC002136.660:2651-2671	4.09695			
0	MDC002149.751:1345-1407	1.79769e+308			
0	MDC002149.751:2007-2430	2.48827			
0	MDC002218.355:6778-7176	1.79769e+308			
0	MDC002270.126:3680-3863	1.79769e+308			
MDP0000163984	MDC002285.447:6979-7069	1.79769e+308	AT4G18530.1		Protein of unknown function (DUF707)
MDP0000157186	MDC002285.478:30843-31155	1.79769e+308	AT4G16444.1		
MDP0000268136	MDC002304.132:819-8300	-2.53248	AT1G24290.1		Bromocyclase T2 family protein
MDP0000457389	MDC002306.103:1840-2063	1.79769e+308	AT5G53550.1	WNK4,ZIK2	with no lysine (K) kinase 4
0	MDC002322.251:26803-27928	4.81002	AT4G11280.1	ACS6, ATACS6	1-aminocyclopropane-1-carboxylic acid (acc) synthase 6
MDP00008307051	MDC002335.203:3094-5164	1.79769e+308	AT1G50430.1	7RED,DWF5,LE,PA,STR	Ergosterol biosynthesis ERG4/ERG24 family
0	MDC002385.280:8975-9237	1.79769e+308			
MDP0000165382	MDC002388.638:6965-12223	1.79769e+308	AT2G41770.1		Protein of unknown function (DUF288)
MDP0000268597	MDC002412.301:3820-15392	1.79769e+308	AT5G27640.1	ATEIF3B-1,ATTIF3B1,EIF3B,EIF3	translation initiation factor 3B1
MDP0000164286	MDC002413.411:10891-11713	-2.76725	AT5G14920.1		Gibberellin-regulated family protein
MDP0000269551	MDC002413.411:4634-4664	1.79769e+308	AT5G14920.1		Gibberellin-regulated family protein
0	MDC002431.300:11772-11965	1.79769e+308	AT5G19130.2		GP1 transamidase component family protein / Gaa1-like family protein
MDP0000263630	MDC002446.247:7797-8476	1.79769e+308	AT3G05950.1		R2M-like cupins superfamily protein
MDP0000830377	MDC002505.371:15860-16380	1.79769e+308	AT1G63700.1	EMB71,MAPKKK4,YDA	Protein kinase superfamily protein
MDP0000897416	MDC002555.575:20823-21885	1.80749			
MDP0000602070	MDC002587.522:8090-8266	1.79769e+308	AT5G04620.2	ATBIOF,BIOF	biotin F
MDP0000525437	MDC002618.102:55-788	1.79769e+308	AT1G20760.1		Calcium-binding EF hand family protein
MDP0000268136	MDC002693.97:512-884	1.79769e+308	CAMTA3,SR1	CAMTA3,SR1	signal responsive 1
MDP0000236536	MDC002765.351:2478-6149	2.51354	MLP423	MLP423	MLP-like protein 423
MDP0000155698	MDC002771.491:4020-6869	-2.80764	AT3G25150.2		Nuclear transport factor 2 (NTF2) family protein with RNA binding (RRM-RBD-RNP motifs) domain
MDP0000699497	MDC002791.491:4020-6869	-1.94137	AT4G25150.1		HAD superfamily, subfamily IIIB acid phosphatase
0	MDC002799.293:2023-2423	2.25333			
MDP0000361511	MDC002827.323:10419-11049	-3.81975	AT2G29330.1	TRI	trypinone reductase
MDP0000788170	MDC002892.343:26056-27195	3.94434	AT1G78780.1		Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000236618	MDC002931.100:11631-11924	1.79769e+308	AT3G12345.1		pathogenesis-related family protein
MDP0000173465	MDC002987.519:16454-16916	2.88122	AT4G38240.1	CGL,CGL1,GNT1	alpha-1,3-mannosyl-glycoprotein beta-1,2-N-acetylglucosaminyltransferase, putative
MDP0000885511	MDC002975.216:22992-23382	2.46891	SIB1	SIB1	sigma factor binding protein 1
MDP0000167437	MDC003038.458:3026-3383	1.79769e+308	AT2G33580.1		Protein kinase superfamily protein
MDP0000120758	MDC003093.180:517-1215	2.722	AT4G25370.1		Double Clip-N motif protein
MDP0000146334	MDC003164.614:3761-6028	-2.65594	AT2G45960.2	ATHH2,PIP1.2,PIP1B,TMP-A	

MDP0000170501	MDC003661.18559137-59369	1.79769e+308	AT1G03370.1		C2 calcium/lipid-binding and GRAM domain containing protein
MDP0000680997	MDC003670.313733-3535	1.79769e+308	AT1G77120.1	ADH,ADH1,ATADH,ATADH1	alcohol dehydrogenase 1
MDP0000147293	MDC003688.1911671-3161	2.53723	AT4G34100.1		RING-U-box superfamily protein
0	MDC003716.30646958-47066	1.79769e+308	AT1G03260.1		SNARE associated Golgi protein family
0	MDC003741.3862311-2600	1.79769e+308			
MDP0000391319	MDC003758.191289-1601	3.01485	AT5G04550.1		Protein of unknown function (DUF668)
0	MDC003761.2403013-3454	2.52991			
MDP0000276506	MDC003761.2407197-17791	4.45347			
MDP0000411166	MDC003788.2905474-5635	1.79769e+308	AT2G38800.1		Plant calmodulin-binding protein-related
MDP0000276278	MDC003807.2211401-12233	1.79769e+308	AT4G22600.1	ANAC073, NAC073, SND2	NAC domain containing protein 73
MDP0000787808	MDC003810.27215817-16803	1.79769e+308	AT4G12350.1	AIMYB42, MYB42	myb domain protein 42
MDP0000273012	MDC003865.5628097-8515	1.79769e+308	AT3G54040.1		PAR1 protein
MDP0000167303	MDC003919.3553369-5166	-1.74607	AT1G01780.1		GATA type zinc finger transcription factor family protein
MDP0000171644	MDC003962.2975407-5482	1.79769e+308	AT5G6900.1		Disease resistance protein (CC-NBS-LRR class) family
MDP0000237113	MDC004009.5594720-15084	1.79769e+308	AT3G18290.1	BTS, EMB2454	zinc finger protein-related
MDP0000854767	MDC004013.428929-2727	1.79769e+308	AT3G12270.1	ATPRMT3, PRMT3	protein arginine methyltransferase 3
0	MDC004047.2064467-4494	1.79769e+308			
MDP0000830926	MDC004049.5161567-2569	2.10525	AT5G16080.1	AICXE17, CXE17	carboxyesterase 17
0	MDC004050.1112970-3698	2.97995			
0	MDC004050.1113000-6340	1.79769e+308			
MDP0000169311	MDC004066.3572616-11039	1.79769e+308	AT3G45140.1	ATLX2, LOX2	lipoxenase 2
MDP0000135837	MDC004095.241944-5617	1.60314	AT1G60140.1	ATTPS10, TPS10	threonase phosphate synthase
0	MDC004097.2328798-9675	3.40094	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
0	MDC004133.3363038-8299	1.79769e+308			
MDP0000564592	MDC004154.3511246-12323	1.79769e+308	AT5G13180.1	ANAC083, NAC083, VNI2	NAC domain containing protein 83
MDP0000487384	MDC004165.256209-4204	-1.8127	AT5G23860.1	TUB8	tubulin beta 8
MDP0000155233	MDC004175.40324292-27127	-2.1379	AT1G75060.1		
MDP0000951190	MDC004175.4036190-7715	1.79769e+308	AT5G24620.1		Protein of unknown function (DUF607)
MDP0000147913	MDC004193.2262439-4271	1.79769e+308	AT4G10910.1		2-oxoalotaurin (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000168767	MDC004225.3541055-10850	1.79769e+308			
MDP0000174018	MDC004233.45720199-20679	2.2613	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000864747	MDC004233.4576800-7280	5.22546	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000864748	MDC004233.4579098-9578	4.01462	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000175004	MDC004259.2863936-10513	1.79769e+308			
MDP0000167080	MDC004293.5501689-8142	1.79769e+308	AT1G14610.1	TWN2, VALRS	valyl-tRNA synthetase / valine-tRNA ligase (VALRS)
MDP0000167098	MDC004293.5508967-71109	1.79769e+308	AT5G51970.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000913358	MDC004324.26315880-16063	1.79769e+308	AT5G67630.1		P-loop containing nucleoside triphosphate hydrolases superfamily protein
MDP0000170316	MDC004331.37824044-24882	-2.69079	AT1G32560.1		Late embryogenesis abundant protein, group 1 protein
MDP0000147581	MDC004374.39919-1173	1.79769e+308	AT5G61820.1		
MDP0000167788	MDC004427.5772224-5046	-1.95298	AT1G37630.1		RING-U-box superfamily protein
0	MDC004475.20015597-16341	5.32451	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000137468	MDC004475.20020541-21775	3.67923	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000121566	MDC004513.349138-370	1.79769e+308	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000065495	MDC004571.1952433-4815	1.79769e+308	AT5G47080.1	CKB1	casein kinase II beta chain 1
MDP0000166057	MDC004613.228115547-12800	1.79769e+308	AT5G05200.1		Protein kinase superfamily protein
MDP0000170777	MDC004652.21048970-50473	1.79769e+308	AT5G53045.1		
MDP0000166875	MDC004673.39510875-13759	-1.9178	AT2G38170.3	ATCAX1, CAX1, RC14	cation exchanger 1
MDP0000249060	MDC004678.22912725-20215	1.79769e+308	AT3G20640.1		basic helix-loop-helix (bHLH) DNA-binding superfamily protein
MDP0000162179	MDC004686.2963969-4432	1.79769e+308	AT5G47910.1	ATRBOHD, RBOHD	respiratory burst oxidase homologue D
MDP0000237403	MDC004719.23421812-23054	2.25432	AT5G42570.1		B-cell receptor-associated 31-like
MDP0000557465	MDC004732.2259663-9840	1.79769e+308	AT2G19730.1		Ribosomal L28e protein family
MDP0000553127	MDC004757.36310617-19812	2.12939	AT3G51680.1		NAD(P)-binding Rossmann-fold superfamily protein
MDP0000168735	MDC004766.5334405-5962	1.79769e+308	AT5G13930.1	ATCHS, CHS, TT4	Chalcone and stilbene synthase family protein
MDP0000716308	MDC004766.55211190-11677	1.79769e+308	AT5G13930.1	ATCHS, CHS, TT4	Chalcone and stilbene synthase family protein
MDP0000913661	MDC004804.3067723-5794	1.88294	AT3G04300.1		RmC-like cupins superfamily protein
0	MDC004821.3923939-9512	1.79769e+308			
0	MDC004849.513202-284	1.79769e+308			
MDP0000271982	MDC004885.7934041-27077	5.6005	AT2G39340.1		SAC3/GANP/Nin1/mts3/elf-3 p25 family
0	MDC004932.32815182-15442	1.79769e+308			
MDP0000136847	MDC004932.32823136-23429	1.79769e+308	AT1G73050.1		Glucose-methanol-choline (GMC) oxidoreductase family protein
0	MDC004932.3292625-30381	3.26688			
MDP0000566117	MDC004936.1147331-11600	2.28845	AT4G20030.1		RNA-binding (RRM/RBD/RNP motifs) family protein
MDP0000170531	MDC004964.4703884-8230	3.33886	AT1G70520.1	CRK2	cysteine-rich RLK (RECEPTOR-like protein kinase) 2
MDP0000148973	MDC004986.3633072-25002	1.40037	AT2G7450.1		Aluminum induced protein with YGL and LRDR motifs
MDP0000121897	MDC005009.620186-9501	9.90789	AT1G27450.1	APT1, ATAPT1	adenine phosphoribosyl transferase 1
MDP0000147784	MDC005054.2495101-5480	1.79769e+308	AT3G59110.1		Protein kinase superfamily protein
MDP0000137705	MDC005122.1964548-6205	2.24	AT1G78440.1	ATGA2OX1, GA2OX1	Arabidopsis thaliana gibberellin 2-oxidase 1
MDP0000166259	MDC005168.48310-1556	2.00714	AT2G38740.1		Halooxid dehalogenase-like hydrolase (HAD) superfamily protein
MDP0000275092	MDC005168.48310-1556	2.00714	AT2G38740.1		Halooxid dehalogenase-like hydrolase (HAD) superfamily protein
0	MDC005194.2193093-3360	1.79769e+308			
MDP0000658768	MDC005200.17434013-34414	3.23991	AT1G11090.1		alpha/beta-Hydrolases superfamily protein
MDP0000702868	MDC005243.3829372-10625	2.27364	AT3G54420.1	ATCHITIV, ATEP3, CHIV, EP3	homolog of carrot EP3-3 chitinase
0	MDC005257.2316448-6485	1.79769e+308			
0	MDC005259.535421-4601	1.79769e+308			
MDP0000273224	MDC005334.309206-8594	-2.16795	AT5G53350.1	CLPX	CLP protease regulatory subunit X
MDP0000450601	MDC005362.2406098-12887	1.79769e+308	AT3G11820.2	AT-SYR1, ATSYR12, ATSYR14	syntaxin of plants 121
MDP0000169025	MDC005381.28329450-29871	1.79769e+308	AT1G12775.1		Pentatricopeptide repeat (PPR) superfamily protein
MDP0000878615	MDC005390.3511698-13402	1.79769e+308	AT1G18400.1	BEE1	BR enhanced expression 1
MDP0000235383	MDC005401.1711389-30232	1.79769e+308	AT1G20110.1	ATPDX1, ATPDX1.3, PDX1, PDX	Aldolase-type TIM barrel family protein
MDP0000690695	MDC005410.2034497-7949	1.79769e+308	AT5G18310.1		
MDP0000167207	MDC005423.3118010-6700	3.44525	AT3G23240.1	ATERF1, ERF1	ethylene response factor 1
MDP0000249227	MDC005445.1362589-31825	2.11406	AT3G53620.1	ATPPa4, PPa4	pyrophosphorylase 4
0	MDC005456.10131462-31741	-2.20103			
0	MDC005479.5219099-1266	1.79769e+308			
MDP0000273966	MDC005490.2408153-8416	1.79769e+308	AT5G66180.3		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000273394	MDC005490.24331260-37061	2.95771	AT5G66160.1	ATRMR1, RMR1	receptor homology region transmembrane domain rln H2 motif protein 1
0	MDC005605.67912982-15465	4.02694	AT1G06650.2		2-oxoalotaurin (2OG) and Fe(II)-dependent oxygenase superfamily protein
0	MDC005625.4104432-4879	1.79769e+308			
MDP0000257243	MDC005640.2063033-6198	4.45015	AT1G73050.1		Glucose-methanol-choline (GMC) oxidoreductase family protein
0	MDC005648.3965701-5725	1.79769e+308			
MDP0000679280	MDC005665.2235790-9206	1.87481	AT3G16770.1	ATEBP, EBP, ERF72, RAP2.3	ethylene-responsive element binding protein
MDP0000807958	MDC005672.14342154-43198	-3.70623	AT5G51550.1	EXL3	EXORDIUM like 3
MDP0000271007	MDC005673.3234405-10172	1.73266	AT3G53970.1		proteasome inhibitor-related
MDP0000275079	MDC005673.3401859-2675	2.64139	AT3G53970.1		proteasome inhibitor-related
MDP0000276802	MDC005701.391549-9015	-2.13886	AT1G64090.1	RTNLB3	Reticular like protein B3
0	MDC005717.700845-1059	1.79769e+308			
MDP0000271088	MDC005717.70836286-47025	1.79769e+308	AT1G79830.1	GC5	golgin candidate 5
MDP0000784851	MDC005723.274102-5374	1.79769e+308	AT1G49000.1		
MDP0000951239	MDC005735.2533461-9299	-1.71542	AT4G05320.2	UBQ10	polyubiquitin 10
MDP0000624279	MDC005778.440252-801	1.79769e+308	AT4G20000.1		VQ motif-containing protein
MDP0000178868	MDC005799.514759-806	-2.33718	AT5G17680.1		Disease resistance protein (TIR-NBS-LRR class), putative
MDP0000232692	MDC005811.34123198-25119	2.96568	AT3G53560.1	ATB5-A, ATCB5-E, B5 #2, CB5-E	cytochrome B5 isoform protein
0	MDC005828.2543570-4032	1.79769e+308			
MDP0000257423	MDC005846.44516819-19559	1.48523	AT2G37430.1		C2H2 and C2HC zinc fingers superfamily protein
MDP0000769402	MDC005857.33310992-11123	1.79769e+308	AT3G07700.3		Protein kinase superfamily protein
0	MDC005890.11917882-18863	2.27453			
MDP0000279409	MDC005893.6217340-26688	1.79769e+308	AT1G50030.1	TOR	target of rapamycin
0	MDC005927.3935902-6584	3.89137	AT5G10830.1		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000280686	MDC005934.14695-15478	1.79769e+308	AT4G13180.1		NAD(P)-binding Rossmann-fold superfamily protein
MDP0000507805	MDC005987.2551295-1536	1.82319	AT2G38470.1	ATWRKY33, WRKY33	WRKY DNA-binding protein 33
MDP0000282531	MDC005992.42510230-24855	1.79769e+308	AT2G16230.1		O-GlcNAcyl hydrolases family 17 protein
MDP0000173750	MDC006022.7106794-7361	1.79769e+308	AT4G37710.1		VQ motif-containing protein
MDP0000281307	MDC006027.2262770-5589	1.79769e+308	AT5G07910.1		Leucine-rich repeat (LRR) family protein
MDP0000280867	MDC006113.2827307-2152	1.79769e+308	AT5G25757.1		RNA polymerase I-associated factor PAF67
MDP0000233439	MDC006132.11038822-42176	1.79769e+308	AT2G31955.1	CNX2	cofactor of nitrate reductase and xanthine dehydrogenase 2
MDP0000233439	MDC006132.1104237-42590	1.79769e+308	AT2G31955.1	CNX2	cofactor of nitrate reductase and xanthine dehydrogenase 2
MDP0000233440	MDC006132.1104034-44983	2.81494			
MDP0000344124	MDC006216.1511502-1745	1.79769e+308			
MDP0000280820	MDC006246.468882-959	2.04655			
0	MDC006260.4628079-8672	2.73287	AT1G23440.1		Peptidase C15, pyrroglutamyl peptidase I-like
MDP0000281098	MDC006273.12926010-22757	-2.5382	AT5G51440.1		HSP20-like chaperones superfamily protein
MDP0000238184	MDC006273.74424-2967	-2.52469	AT5G51440.1		HSP20-like chaperones superfamily protein
MDP0000032171	MDC006283.26135240-41767	-1.94697	AT1G09510.1		Protein of unknown function, DUF538
0	MDC006289.4087320-58				

MDP0000843913	MDC006630.345:13587-14886	1.79304	AT2G36690.1	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000552328	MDC006653.435:4109-5236	2.26965	AT1G75800.1	Pathogenesis-related thaumatin superfamily protein
MDP0000249299	MDC006684.239:7756-10611	-2.91344	AT3G21190.1	O-fucosyltransferase family protein
MDP0000249161	MDC006776.574:7590-21009	1.79769+308	AT4G34580.1	Sec14p-like phosphatidylinositol transfer family protein
MDP0000405576	MDC006783.229:11947-13407	1.79769+308	AT1G52433.1	
MDP0000614645	MDC006784.251:4983-11622	2.1349	AT3G25655.1	
0	MDC006793.328:2502-2994	2.61703		inflorescence deficient in abscission (IDA)-like 1
MDP0000248822	MDC006814.441:8965-9324	5.62372	AT2G26560.1	Phospholipase A 2A
MDP0000814329	MDC006848.168:4788-4157	2.82974	AT3G20650.1	ATP-citrate lyase B-1
MDP0000805422	MDC006858.526:1099-1672	1.86738	AT4G17500.1	ethylene responsive element binding factor 1
MDP0000343634	MDC006858.527:5849-6150	-3.44095		
MDP0000238475	MDC006888.339:876-1073	1.79769+308	AT3G30300.1	O-fucosyltransferase family protein
MDP0000178516	MDC006898.720:8191-8834	-2.21317	AT1G66295.1	
MDP0000136298	MDC006922.133:35876-36560	-3.84131	AT5G09530.1	hydroxyproline-rich glycoprotein family protein
MDP0000248516	MDC006922.133:35876-36560	-3.84131	AT5G09530.1	hydroxyproline-rich glycoprotein family protein
MDP0000137117	MDC006985.165:1223-3076	-1.92555	AT3G11400.1	eukaryotic translation initiation factor 3G1
0	MDC006994.179:16210-16462	1.79769+308		
MDP0000184167	MDC006995.275:50236-50262	1.79769+308		
MDP0000617009	MDC007021.246:25478-25865	-2.50768	AT1G80770.2	P-loop containing nucleoside triphosphate hydrolases superfamily protein
0	MDC007024.343:8632-8930	2.35329	AT2G46600.1	Calcium-binding EF-hand family protein
MDP0000182364	MDC007070.485:4341-4878	-2.28142	AT5G38760.1	Late embryogenesis abundant protein (LEA) family protein
MDP0000806544	MDC007073.330:12070-12457	1.79769+308	AT3G09270.1	glutathione S-transferase TAU8
0	MDC007088.513:4788-1156	1.79769+308	AT2G24810.2	ATP family protein
MDP0000279516	MDC007100.397:805-12837	1.79769+308	AT2G18470.1	rod-like extrinsic-like receptor kinase 4
MDP0000249404	MDC007109.204:49-2474	1.79769+308	AT4G00590.1	N-terminal nucleophile aminohydrolases (Ntn hydrolases) superfamily protein
MDP0000147996	MDC007197.415:11084-11948	1.79769+308	AT3G08690.1	ubiquitin-conjugating enzyme 11
MDP0000176426	MDC007216.431:8449-7603	1.79769+308	AT1G68450.1	VC motif-containing protein
0	MDC007223.300:45679-45974	-2.75104		
MDP0000279533	MDC007236.83:16404-17781	1.79769+308	AT3G26040.1	HXXXD-type acyl-transferase family protein
MDP0000181621	MDC007245.594:763-2225	1.79769+308	AT3G08880.1	
MDP0000693594	MDC007269.339:4912-5995	2.40891	AT4G37300.1	maternal effect embryo arrest 59
MDP0000279107	MDC007287.149:7106-7274	1.79769+308	AT2G27980.1	Acyl-CoA N-acyltransferase with RING/FYVE/PHD-type zinc finger domain
MDP0000811844	MDC007352.390:117258	1.82193		
0	MDC007364.345:4479-4876	1.8905		
MDP0000147939	MDC007394.331:695-1727	-2.14127	AT3G55430.1	O-Glycosyl hydrolases family 17 protein
MDP0000180472	MDC007395.672:2994-3955	-5.2714	AT4G25040.1	Uncharacterised protein family (UPF0497)
MDP0000175691	MDC007406.309:1539-2750	1.79769+308	AT5G28000.1	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000123467	MDC007407.185:1806-1908	1.79769+308	AT5G13490.1	cytochrome P450, family 72, subfamily A, polypeptide 9
MDP0000123467	MDC007407.185:1806-2255	1.79769+308	AT5G13080.1	WRKY DNA-binding protein 75
MDP0000282711	MDC007441.706:4194-6829	1.9882	AT3G13710.1	preylated RAB acceptor 1.F4
MDP0000231813	MDC007467.200:80611-80777	1.79769+308	AT3G26580.1	Late embryogenesis abundant protein (LEA) family protein
0	MDC007474.161:727-1187	2.13649		
MDP0000281921	MDC007517.244:812-8403	1.79769+308	AT4G02920.1	
MDP0000231711	MDC007566.303:5209-5295	1.79769+308	AT3G25590.1	
0	MDC007581.595:2473-2576	1.79769+308	AT4G28460.1	unknown protein
MDP0000178934	MDC007586.376:13849-14356	-1.89038	AT2G25770.1	Polyketide cyclase/dehydrase and lipid transport superfamily protein
MDP0000238652	MDC007632.133:37-167	1.79769+308	AT5G15860.1	prenylcysteine methyltransferase
MDP0000943804	MDC007651.256:10939-11228	1.79769+308	AT4G32330.1	ascorbate peroxidase 6
MDP0000281059	MDC007667.245:11085-11336	1.79769+308	AT1G71980.1	Protease-associated (PA) RING/U-box zinc finger family protein
MDP0000462809	MDC007696.347:224-1274	-2.36735	AT4G32390.1	Nucleotide-sugar transporter family protein
MDP0000284756	MDC007726.450:8011-6436	-1.90333	AT1G78880.1	Ubiquitin-specific protease family C19-related protein
MDP0000279567	MDC007779.587:2989-3343	1.79769+308	AT1G4630.1	cytochrome P450, family 72, subfamily A, polypeptide 14
0	MDC007797.587:3489-4308	1.95177	AT3G14880.1	signal recognition particle receptor alpha subunit family protein
MDP0000320004	MDC007801.297:1668-14062	-2.60268	AT4G30600.1	Phosphate-responsive 1 family protein
MDP0000279567	MDC007839.76:2055-4737	-1.98232	AT1G35140.1	Acyl-CoA N-acyltransferases (NAT) superfamily protein
MDP0000177906	MDC007892.251:15906-1664	1.86793	AT5G16800.2	WRKY DNA-binding protein 40
MDP0000156208	MDC007970.423:2221-3402	1.79769+308	AT5G17820.1	Peroxidase superfamily protein
0	MDC008017.329:6473-7175	2.01024	AT2G46150.1	Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family protein
MDP0000176969	MDC008031.166:10358-10802	-1.71749	AT2G33820.1	Mitochondrial substrate carrier family protein
0	MDC008031.166:8984-9384	-1.91543	AT3G60030.1	squamosa promoter-binding protein-like 12
MDP0000178304	MDC008070.309:694-1245	1.79769+308		
MDP0000180902	MDC008107.194:8214-8566	1.79769+308	AT3G09270.1	glutathione S-transferase TAU8
MDP0000176147	MDC008111.220:3257-3489	1.79769+308	AT1G52800.1	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
0	MDC008132.347:2842-3005	1.79769+308	AT3G08010.1	RNA binding
MDP0000282113	MDC008133.431:23701-30184	-2.02622	AT5G39710.1	Tetratricopeptide repeat (TPR)-like superfamily protein
MDP0000124013	MDC008156.258:1804-1914	1.79769+308	AT4G13250.1	NAD(P)-binding Rossmann-fold superfamily protein
0	MDC008185.596:848-1396	4.18103		
MDP0000124065	MDC008191.272:1308-2582	1.33928	AT2G27830.1	
0	MDC008212.493:3616-4058	-2.22497	AT5G43180.1	Protein of unknown function, DUF599
MDP0000280265	MDC008216.318:26921-27156	1.79769+308	AT4G20620.1	FAD-binding Berberine family protein
0	MDC008227.470:6-265	2.67388		
MDP0000248806	MDC008228.299:15226-24695	1.79769+308	AT3G26070.1	Plastid-lipid associated protein PAP / fibrillin family protein
MDP0000280265	MDC008231.317:2716-4497	2.51441	AT5G24090.1	chitinase A
MDP0000182082	MDC008275.176:13207-16886	1.834	AT1G10670.1	ATP-citrate lyase A-1
MDP0000149907	MDC008363.128:1344-2027	-2.4068	AT1G51970.1	S-locus lectin protein kinase family protein
MDP0000149907	MDC008363.128:1584-2982	2.61724	AT5G05190.1	plant invertase/pectin methyltransferase inhibitor superfamily protein
MDP0000281408	MDC008378.283:5092-5500	1.92703	AT5G05190.1	serine hydroxymethyltransferase 7
0	MDC008382.148:13043-13406	1.79769+308		
MDP0000281701	MDC008389.364:4307-10927	-2.13921	AT2G34770.1	fatty acid hydroxylase 1
MDP0000279279	MDC008406.198:19837-20128	1.79769+308	AT4G21390.1	B120
MDP0000636165	MDC008510.241:8559-10422	3.04068	AT4G02330.1	Plant invertase/pectin methyltransferase inhibitor superfamily protein
0	MDC008521.354:1264-1327	1.79769+308		
MDP0000720186	MDC008527.309:2198-2323	1.79769+308	AT2G34250.1	SecY protein transport family protein
MDP0000487702	MDC008598.180:29014-29454	1.79769+308	AT1G30950.1	F-box family protein
0	MDC008593.271:10114-10663	2.28791	AT1G57520.1	nodulin MN21 / EamA-like transporter family protein
MDP0000110910	MDC008563.295:2531-3710	1.79769+308	AT5G0420.2	Cupredoxin superfamily protein
MDP0000873376	MDC008586.420:17793-18695	-1.96409	AT1G72230.1	
0	MDC008600.171:902-1400	4.88147		
MDP0000285032	MDC008614.269:11939-16468	2.46831	AT3G18830.1	polyol/monosaccharide transporter 5
MDP0000279227	MDC008674.603:144-2027	-2.4068	AT2G22740.1	Cysteine proteases superfamily protein
MDP0000124372	MDC008769.540:381-2223	1.79769+308	PUB23	plant U-box 23
MDP0000190474	MDC008769.546:2286-3508	1.79769+308	PUB23	plant U-box 23
MDP0000191423	MDC008781.274:12188-14442	2.96124	AT1G22170.1	Phosphoglycerate mutase family protein
MDP0000191423	MDC008781.274:14553-14944	2.64127	AT1G22170.1	Phosphoglycerate mutase family protein
MDP0000288293	MDC008798.391:1937-20212	5.12026	AT1G24023.1	MLP423
MDP0000185506	MDC008808.256:4241-10398	-2.75566	AT5G12190.1	RNA-binding (RMR/RBP motifs) family protein
MDP0000188275	MDC008847.375:4627-4939	1.79769+308	AT1G56660.1	
MDP0000287351	MDC008886.243:375-5075	1.79769+308	AT5G36930.2	Disease resistance protein (TIR-NBS-LRR class) family
MDP0000969497	MDC008926.173:3439-3781	-2.3258	AT5G59320.1	lipid transfer protein 3
MDP0000734515	MDC008930.262:14950-15201	1.79769+308	AT1G05180.1	NAD(P)-binding Rossmann-fold superfamily protein
MDP0000290937	MDC008947.382:14535-20023	3.12302		
MDP0000347336	MDC008953.300:591-12745	2.93419		
0	MDC008958.527:6035-6390	1.79769+308		
MDP0000188138	MDC008981.224:3552-6225	1.79769+308	AT5G21940.1	
MDP0000907032	MDC009045.262:4301-14844	2.52716	AT5G48100.1	Laccase/Diphenoxy oxidase family protein
MDP0000291620	MDC009067.627:8837-9392	-2.07458	AT1G58170.1	Disease resistance-responsive (drigent-like protein) family protein
MDP0000287628	MDC009095.320:4320-11111	-1.76609	AT3G58810.1	metal tolerance protein A2
MDP0000193050	MDC009100.720:14269-19338	2.72097	AT5G26340.1	Major facilitator superfamily protein
0	MDC009100.743:10602-10864	1.79769+308		
MDP0000746652	MDC009139.374:7849-8934	2.91738	AT2G46150.1	Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000138090	MDC009231.274:4163-4333	1.79769+308	AT1G58440.1	FAD/NAD(P)-binding oxidoreductase family protein
MDP0000841703	MDC009247.159:1041-7164	2.43611	AT2G47800.1	multidrug resistance-associated protein 4
MDP0000361876	MDC009250.269:24582-24915	1.79769+308	AT3G11440.1	myb domain protein 65
0	MDC009251.558:7920-10453	-3.37738	AT4G03210.1	xyloglucan endotransglucosylase/hydrolase 9
MDP0000124719	MDC009291.198:2462-2529	1.79769+308		
MDP0000239720	MDC009297.162:8847-9498	-1.9762	AT5G47610.1	RING/U-box superfamily protein
MDP0000671324	MDC009336.266:5288-15663	2.26922	AT5G05930.1	guanlyl cyclase 1
MDP0000054527	MDC009349.320:566-1709	1.79769+308	AT4G10490.1	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000262674	MDC009360.278:896-3116	3.05153	AT1G78880.1	D-mannose binding lectin protein with Apple-like carbohydrate-binding domain
0	MDC009368.194:1356-15917	-1.88738	AT1G04743.1	
MDP0000865425	MDC009393.166:1252-1510	1.79769+308		
MDP0000941000	MDC009404.603:2897-8558	1.79769+308	AT5G17680.1	disease resistance protein (TIR-NBS-LRR class), putative
MDP0000290562	MDC009483.39:12100-14889	8.20719	AT1G47670.1	Transmembrane amino acid transporter family protein
MDP0000936748	MDC009567.313:17183-20584	-1.89197	AT3G5570.1	GATA type zinc finger transcription factor family protein
MDP0000150032	MDC009601.163:20757-21849	-1.7773		
MDP0000285243	MDC009604.192:12640-14455	1.79769+308	AT4G13220.1	
MDP0000187983	MDC009616.38:20066-24921	2.38728	AT4G19810.1	Glycosyl hydrolase family protein with chitinase insertion domain
MDP0000290045	MDC009616.38:20066-24921	2.38728	AT4G19810.1	Glycosyl hydrolase family protein with chitinase insertion domain
MDP0000290045	MDC009630.367:24050-24262	1.79769+308	AT2G03810.4	18S pre-ribosomal assembly protein gar2-related
MDP0000125002	MDC009674.311:12650-17839	1.79769+308	AT2G10400.1	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000125002	MDC009727.218:5205-52777	1.79769+308	AT2G42810.2	protein phosphatase 5.2
MDP0000757636	MDC009738.162:4550-8590	1.79769+308	AT1G26810.1	galactosyltransferase 1
MDP00001935				

0	MDC009830.388:3008-4348	1.79769e+308	AT5G1930.1	CHS, TT4, ATCHS	Chalcone and stilbene synthase family protein
MDP0000703851	MDC009836.225:17066-18219	2.31731	AT4G37300.1	MEE59	Mutual effect embryo arrest 59
MDP0000850409	MDC009848.204:8363-8600	-4.67506			
MDP0000125095	MDC009861.437:3891-4319	-2.80388	AT5G38760.1		Late embryogenesis abundant protein (LEA) family protein
MDP0000291925	MDC009861.464:1768-1370	-2.02682	AT5G38760.1		Late embryogenesis abundant protein (LEA) family protein
MDP0000187103	MDC009909.204:5928-6981	1.79769e+308	AT5G67080.1	MAPKKK19	mitogen-activated protein kinase kinase kinase 19
MDP0000454694	MDC009933.158:11532-19587	-2.20363	AT1G72820.1		Mitochondrial substrate carrier family protein
MDP0000125143	MDC009940.459:13383-13777	1.79769e+308	AT2G19385.1		Zinc ion binding
MDP0000287586	MDC009986.307:3331-10534	2.41066	AT5G49230.1	HRB1	Drought-responsive family protein
MDP0000191667	MDC010015.212:1411-1436	2.13913	AT4G13490.1	ATLEUC1,IL1L1	isocitrate lyase isomerase large subunit 1
MDP0000289011	MDC010104.525:5261-8066	2.73062	AT3G09270.1	ATGSTU8,GSTU8	glutathione S-transferase TAU 8
MDP0000285894	MDC010113.132:1890-6718	1.79769e+308	AT5G53130.1	ATCNGC1,CNGC1	cyclic nucleotide gated channel 1
MDP0000645502	MDC010137.193:5899-6763	1.79769e+308			
0	MDC010174.373:9987-12973	1.79769e+308	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000909081	MDC010183.335:5076-5272	1.79769e+308	AT5G63310.1	ATNDPK2,NDPK IA,NDPK IA I	NAD(P)-linked oxidoreductase superfamily protein
MDP0000176953	MDC010195.886:3529-4847	-3.53045	AT1G55260.1		nonclassical diphosphate kinase 2
MDP0000125336	MDC010201.200:11935-13257	1.6832	AT5G59530.1		ubiquitin inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000777260	MDC010224.339:7684-14866	1.79769e+308			2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000138612	MDC010239.242:2210-2815	3.28285		MLP423	MLP-like protein 423
MDP0000116244	MDC010239.242:2917-3044	1.79769e+308	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000638442	MDC010241.223:2589-3910	2.42596	AT5G51970.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000188052	MDC010241.225:11561-12807	2.52239	AT5G51970.1		GroES-like zinc-binding alcohol dehydrogenase family protein
MDP0000215295	MDC010246.430:21589-22966	2.2344	AT1G05010.1	ACO4,EAT1,EFE	ethylene-forming enzyme
MDP0000125388	MDC010264.104:2067-4931	1.79769e+308	AT3G51960.1		Protein kinase family protein
MDP0000668138	MDC010296.225:19484-19807	1.79769e+308	AT3G52250.1		Duplicated homeodomain-like superfamily protein
MDP0000258062	MDC010332.272:588-1152	1.79769e+308	AT5G10350.1		RNA-binding (RRM/RBD/RNP motifs) family protein
MDP0000233489	MDC010426.795:7913-8261	1.79769e+308	AT5G48820.1	ICK6,KRP3	inhibitor/interactor with cyclin-dependent kinase
MDP0000292448	MDC010444.140:7446-9204	-3.31146	AT5G38020.1		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000738596	MDC010462.160:15024-15860	1.79769e+308			
MDP0000588940	MDC010473.396:14867-15858	-3.86943	AT3G27200.1		Cupredoxin superfamily protein
0	MDC010474.340:3456-4185	1.79769e+308	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
0	MDC010476.238:18498-19659	4.06594	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000292131	MDC010476.238:34773-35325	3.99199	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
0	MDC010507.323:2408-2497	1.79769e+308			
MDP0000288622	MDC010541.240:1517-3505	1.79769e+308	AT5G22860.1		Serine carboxypeptidase S28 family protein
MDP0000194046	MDC010550.498:7038-7904	1.79769e+308	AT3G09270.1	ATGSTU8,GSTU8	glutathione S-transferase TAU 8
MDP0000566057	MDC010577.405:11254-12570	1.79769e+308	AT3G28690.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000557646	MDC010584.403:9855-18868	1.79769e+308	AT3G05500.1		Rubber elongation factor protein (REF)
MDP0000289247	MDC010589.234:1224-1539	1.79769e+308		CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
MDP0000440922	MDC010630.204:5140-5351	1.79769e+308	AT1G08450.1	ACIRT3,CRT3,EBS2,PSL1	chalcone 3
MDP0000191951	MDC010729.433:8183-8534	1.79769e+308			
MDP0000259250	MDC010766.217:2450-4361	-2.08975	AT4G11220.1	BT2,RTNLB2	VRB2-interacting protein 2
MDP0000549056	MDC010870.164:3464-9528	3.09695	AT1G68840.1	EDF2,RAp2.8,RAV2,TEM2	related to ABI3/VP1 2
0	MDC010876.313:27953-28158	1.79769e+308			
0	MDC010912.583:5714-6300	3.70536		PRD6, ATPDR6	pleiotropic drug resistance 6
MDP0000893506	MDC010932.713:30968-31739	1.79769e+308	AT1G68450.1		VQ motif-containing protein
MDP0000167492	MDC010968.194:35563-43410	2.47673	AT2G26780.1		ARM repeat superfamily protein
0	MDC010981.1245:18382-19274	3.15588	AT3G51960.1	ACS1, AT-ACS1	ACC synthase 1
MDP0000289768	MDC011000.158:4622-5925	1.79769e+308	AT3G23250.1	ATMYB15,ATY19,MYB15	myb domain protein 15
MDP0000126098	MDC011163.578:6912-8415	1.79769e+308	AT5G20030.1		Plant Tudor-like RNA-binding protein
MDP0000188976	MDC011170.439:2837-3077	1.79769e+308	AT2G15960.1		Protein of unknown function (DUF607)
MDP0000261552	MDC011264.166:12261-14181	-2.83625	AT1G08575.1		Protein of unknown function (DUF666)
MDP0000892427	MDC011311.340:11831-15202	2.41446	AT1G30755.1		enzyme binding/tetraprote binding
MDP0000907603	MDC011337.355:7470-8262	-2.25482	AT3G59400.1	GUN4	
0	MDC011359.150:1008-1311	1.79769e+308			
0	MDC011372.235:19894-20135	1.79769e+308			
MDP0000560179	MDC011403.321:1647-19830	2.34318	AT1G69370.1	cm-3,CM3	chorismate mutase 3
0	MDC011401.250:14560-14880	-2.31698			
MDP0000138204	MDC011412.200:2474-2656	1.79769e+308	AT1G01650.1	ATSPPL4,SPPL4	SIGNAL PEPTIDE PEPTIDASE-LIKE 4
MDP0000415910	MDC011412.206:13093-13390	1.79769e+308	AT4G01840.1	ATKCO5,ATTPK5,KCO5,TPK5	Ca2+ activated outward rectifying K+ channel 5
MDP0000290114	MDC011437.437:35717-37203	-2.74555	AT2G01770.1	ATVIT1,VIT1	vacuolar iron transporter 1
MDP0000051172	MDC011441.318:5071-6426	1.79769e+308	AT4G38620.1	ATMYB4,MYB4	myb domain protein 4
MDP0000892427	MDC011449.971:1885-12670	1.79769e+308	AT2G19880.1		unknown protein
MDP0000286168	MDC011456.83:10260-11593	-2.17958	AT5G13490.1	AAC2	ADP/ATP carrier 2
0	MDC011459.391:12253-12872	1.79769e+308	AT2G39210.1		Major facilitator superfamily protein
MDP0000361947	MDC011469.280:8071-8371	3.51144			
MDP0000619511	MDC011469.280:8141-8293	2.3818	AT4G11820.2	EMB278,FKP1,HMGS,MVA1	hydroxymethylglutaryl-CoA synthase / HMG-CoA synthase / 3-hydroxy-3-methylglutaryl coenzyme A synthase
MDP0000902434	MDC011537.547:9633-10450	2.21998	AT4G05030.1		Copper transport protein family
MDP0000902434	MDC011542.145:14812-15089	-2.78853	AT4G05030.1		Copper transport protein family
MDP0000290254	MDC011554.266:8336-11088	2.79301			
MDP0000185643	MDC011581.443:3493-3055	2.3818	AT1G70990.1	GATL9,LGT8	glucosyl transferase family 8
MDP0000185643	MDC011581.443:34972-37559	1.79769e+308	AT1G70990.1	GATL9,LGT8	glucosyl transferase family 8
0	MDC011583.325:5690-5843	1.79769e+308			
MDP0000150382	MDC011596.290:3499-8925	2.75396	AT2G43820.1	ATSAGT1,GT,SAGT1,SGT1,UC	UDP-glucosyltransferase 74F2
0	MDC011598.259:10860-11398	2.42453			
MDP0000926540	MDC011602.378:2520-9183	1.88683	AT3G02430.1		Protein of unknown function (DUF679)
0	MDC011603.242:16362-17137	1.86683	AT4G37200.1		CAP (Cysteine-rich secretory proteins, Antigen 5, and Pathogenesis-related 1 protein) superfamily protein
MDP0000199152	MDC011612.43:0-3077	2.18079	AT4G16730.1	TPS02	terpene synthase 02
MDP0000139971	MDC011642.187:6067-13143	2.14987	AT4G36710.1		GRAS family transcription factor
MDP0000128455	MDC011659.224:3319-4725	-3.00214	AT1G10200.1	WLIM1	GATA type zinc finger transcription factor family protein
MDP0000292543	MDC011673.338:3911-1160	1.79769e+308	AT3G22380.2	TIC	time for coffee
MDP0000251253	MDC011704.133:11215-11348	1.79769e+308	AT1G76490.1	HMG1,HMGR1	hydroxymethylglutaryl CoA reductase 1
MDP0000771887	MDC011723.416:11571-12015	-2.22297	AT1G60950.1	ATFD2,FED A	2Fe-2S ferredoxin-like superfamily protein
MDP0000328550	MDC011745.99:15351-15722	-2.18845			
0	MDC011770.416:7739-8412	2.51628	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000873235	MDC011773.384:2494-3055	5.81577	AT2G23270.1		uridine protein
MDP0000430546	MDC011784.207:16-913	2.39345	AT3G54420.1	ATCHITV1,ATEP3,CHIV,EP3	homolog of carrot EP3-3 chitinase
MDP0000336546	MDC011784.298:1990-4727	2.46989	AT3G54420.1	ATCHITV1,ATEP3,CHIV,EP3	homolog of carrot EP3-3 chitinase
MDP0000871219	MDC011792.236:31818-38424	1.79769e+308	AT3G27460.1		SGF29 tudor-like domain
MDP0000618065	MDC011802.265:2819-3744	-1.97863	AT3G26420.1	ATRZ-1A	RNA-binding (RRM/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain
MDP0000416120	MDC011822.207:1057-11980	1.79769e+308	AT3G11820.2	AT-SYR1,ATSY1P21,ATSYR1,1	synaptin of plants 121
0	MDC011856.191:7047-7379	1.79769e+308	AT4G27060.1	CN,SPR2,TOR1	ARM repeat superfamily protein
0	MDC011857.111:12385-12818	-2.80994			
0	MDC011938.114:11698-11941	1.79769e+308			
MDP0000259719	MDC011953.180:21178-29290	2.13451	AT1G21480.1		Exostosin family protein
0	MDC011960.157:14970-15370	1.79769e+308			
MDP0000203230	MDC011969.177:1032-2423	5.0803	AT5G38940.1		RmlC-like cupins superfamily protein
MDP0000139824	MDC011983.274:13866-23337	-2.1557	AT1G34630.1		Uncharacterised protein family SERF
MDP0000342813	MDC011995.314:7397-7948	1.79769e+308	AT2G20390.1		
MDP0000576584	MDC011995.314:6927-7232	1.79769e+308	AT5G64160.1		FAD/NAD(P)-binding oxidoreductase family protein
MDP0000910523	MDC011998.433:31142-33376	2.47451	AT5G05320.1		
MDP0000647373	MDC012019.302:8116-8353	1.79769e+308			
MDP0000140046	MDC012024.335:4054-9352	2.79415	AT5G47770.1	FPS1	farnesyl diphosphate synthase 1
0	MDC012039.280:32641-32933	1.79769e+308			
MDP0000750556	MDC012049.250:246-726	3.88038	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000259681	MDC012049.376:1086-2288	3.32901			
MDP0000418277	MDC012049.376:7654-8475	4.23797			
MDP0000260110	MDC012049.377:1467-1947	3.64793	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000611200	MDC012049.378:11944-12424	4.45514	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000195614	MDC012049.378:15381-15861	3.37256	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000231443	MDC012049.378:7676-8991	3.59297	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000241271	MDC012083.378:41-1721	-2.27036	AT3G06778.1		Chaperone DnaJ-domain superfamily protein
MDP0000152278	MDC012083.521:11-527	4.0936	AT4G16740.1	ATTPS03,TPS03	terpene synthase 03
MDP0000126789	MDC012097.411:814-2116	1.79769e+308	AT1G07230.1	NPC1	non-specific phospholipase C1
MDP0000233177	MDC012168.191:14092-15547	-3.4026	AT1G10550.1	XET_XTH33	xyloglucan:xyloglucosyl transferase 33
MDP0000213558	MDC012226.83:8174-8929	2.47451	AT1G74950.1	JAZ2,TIFY10B	TIFY domain/Divergent CCT motif family protein
MDP0000126892	MDC012245.148:3093-3709	1.79769e+308	AT4G38060.2		
MDP0000295823	MDC012255.109:11234-11389	1.79769e+308	AT5G20040.1	ATIPT9,IPT9	isopentenyltransferase 9
0	MDC012256.180:17521-17661	1.79769e+308			
0	MDC012284.228:14592-15163	3.41084			
MDP0000126954	MDC012310.593:2815-9479	1.79769e+308			
0	MDC012310.599:10117-10381				

MDP0000427172	MDC012537.136:2472-3087	5.39463	AT1G69060.1	Chaperone DnaJ-domain superfamily protein
MDP0000648218	MDC012539.194:16182-17073	1.9807	AT1G23710.1	Protein of unknown function (DUF1645)
MDP0000150727	MDC012578.402:50168-50408	1.79769+308	AT1G50500.1	Membrane trafficking VPS53 family protein
MDP0000127122	MDC012582.369:20321-21404	-1.95481	AT2G32300.1	UCC1
MDP0000789528	MDC012593.380:41193-42423	-3.23263	AT3G25250.1	LHCb2.LHCb2.2
MDP0000152323	MDC012595.126:7479-7658	1.79769+308	AT3G22430.1	phytochrome II light harvesting complex gene 2.2
MDP0000127134	MDC012597.1552:1503-2265	3.29898	AT3G23240.1	ATERF1.ERF.1
MDP0000205052	MDC012623.194:30088-30799	1.79769+308		ethylene response factor 1
MDP0000300351	MDC012623.194:31981-34645	1.79769+308		
MDP0000197234	MDC012641.253:15599-15998	1.93322	AT5G14270.2	ATBET9.BET9
MDP0000127185	MDC012660.72:295-5944	1.79769+308	AT5G10720.1	ANAC002.ATAF1
MDP0000334047	MDC012688.235:31743-33240	3.21746		bromodomain and extraterminal domain protein 9
MDP0000809488	MDC012696.212:377-1037	1.91257	AT4G27450.1	NAC (No Apical Terminus) domain transcriptional regulator superfamily protein
0	MDC012716.121:13459-14896	1.88079	AT4G11280.1	
MDP0000851204	MDC012735.249:4715-5222	-1.89038	ACS6. ATAC56	Aluminium induced protein with YGL and LRDR motifs
MDP0000241694	MDC012816.263:1287-2659	3.41245	AT2G25770.1	1-aminocyclopropane-1-carboxylic acid (acc) synthase 6
MDP0000299311	MDC012816.264:988-1468	4.67582	AT1G24020.1	Polyketide cyclase/dehydrase and lipid transport superfamily protein
MDP0000295542	MDC012816.382:14124-14604	5.13553	MLP423	MLP-like protein 423
MDP0000295543	MDC012816.382:17333-17813	5.13221	MLP423	MLP-like protein 423
MDP0000814399	MDC012816.382:20717-21197	4.71788	MLP423	MLP-like protein 423
MDP0000295540	MDC012816.382:7552-8032	4.73806	MLP423	MLP-like protein 423
MDP0000294030	MDC012817.651:4113-4501	1.79769+308		
MDP0000127346	MDC012859.232:2291-2690	1.79769+308	AT5G16940.1	carbon-sulfur lyases
MDP0000364657	MDC012885.350:14139-14436	-1.84875		
MDP0000470916	MDC012888.280:16453-18375	2.25112	AT5G20230.1	ATBCB.BCB.SG14
MDP0000808076	MDC012888.280:5525-6239	2.08673	AT5G20230.1	ATBCB.BCB.SG14
0	MDC012892.148:4018-4407	1.79769+308		
MDP0000155307	MDC012898.383:1071-4451	-1.78424	AT5G66740.1	Protein of unknown function (DUF620)
0	MDC012902.215:12407-12525	1.79769+308	AT5G0710.1	myoD1
MDP0000879217	MDC012905.365:22031-22294	1.79769+308	AT5G58860.1	cytochrome P450, family 86, subfamily A, polypeptide 1
MDP0000206620	MDC012905.365:5717-11456	-2.31112	AT2G29640.1	JOSEPHIN-like protein
MDP00002041771	MDC012934.235:1022-17184	1.97977	AT2G22250.2	AAT.ATAAT.MEE17
MDP0000297676	MDC012951.271:9076-10542	1.79769+308	AT5G20230.1	aspartate aminotransferase
MDP0000543204	MDC012957.285:314-3413	1.79769+308		Halocidal dehalogenase-like hydrolase (HAD) superfamily protein
MDP0000141463	MDC012987.400:9772-11178	-3.00214	AT1G10200.1	WLIM1
MDP0000322416	MDC013003.189:92143-92977	1.79769+308	AT5G16360.1	GATA type zinc finger transcription factor family protein
MDP0000297138	MDC013044.213:3080-8904	1.79769+308	AT4G33580.1	NC domain-containing protein-related
MDP0000744506	MDC013064.706:8737-8927	1.79769+308	AT4G33580.1	beta carboxyl anhydrase 5
MDP0000217000	MDC013070.55:428-5946	-4.65078	AT1G58050.1	RNA helicase family protein
MDP0000295565	MDC013084.249:842-11955	1.79769+308	AT5G59890.1	Gln:ubiquitin-requiring factor protein
MDP0000198406	MDC013085.232:856-1627	1.74151	AT4G03510.1	Protein of unknown function (DUF1637)
MDP0000943292	MDC013096.127:30413-30872	3.16275	AT2G47485.1	RING membrane-anchor 1
MDP0000298575	MDC013096.127:5650-13638	1.79769+308	AT1G68190.1	
MDP0000298767	MDC013101.424:1874-8337	1.79769+308	AT5G13020.1	B-box zinc finger family protein
0	MDC013104.683:2153-2490	1.79769+308		Emy N Terminus (ENT) plant Tudor-like domains-containing protein
MDP0000391210	MDC013104.680:7020-7701	1.79769+308	NHL3	NHL3
MDP0000298031	MDC013115.223:1700-1934	1.79769+308	AT4G19210.1	RNase I/II-like 3
MDP0000297983	MDC013124.81:6887-8946	-2.2684	ATRLI2.RLI2	RNAse I inhibitor protein 2
MDP0000775613	MDC013128.283:1039-38537	2.59035	ATCOL2.COL2	CONSTANS-like 2
MDP0000729348	MDC013141.176:13225-14599	1.79769+308	AT3G48180.1	Late embryogenesis abundant protein (LEA) family protein
MDP0000294360	MDC013237.128:1097-2970	1.96755	AT3G48180.1	
MDP0000746564	MDC013254.184:20565-22846	1.79769+308	ATL3	RING-U-box superfamily protein
MDP0000216005	MDC013252.274:11595-11880	4.44723	AT5G28770.2	bZIP transcription factor family protein
MDP0000770800	MDC013293.150:1319-7088	1.85566	AT3G20590.1	AtbZIP63.BZO2H3
MDP0000552625	MDC013293.259:4365-6445	1.79769+308	ATOMT1.OMT1	O-methyltransferase 1
MDP0000251667	MDC013317.553:6374-6980	2.19849	ATOMT1.OMT1	O-methyltransferase 1
MDP0000297541	MDC013322.286:4646-5170	-3.45586	SRPK4	serine/threonine protein kinase 4
MDP0000296910	MDC013323.310:3396-3941	2.23861	AT4G10810.1	Calcium-dependent lipase-binding (CaLB domain) family protein
MDP0000309613	MDC013342.82:9231-9119	2.22965	AT3G2740.1	flavodoxin like quinone reductase 1
0	MDC013340.296:1896-2851	2.15177	AT5G6900.1	Disease resistance protein (CC-NBS-LRR class) family
MDP0000879254	MDC013370.129:3544-3757	1.79769+308	AT5G27740.1	EMB161.EMB251.EMB2775.RF
MDP0000321244	MDC013391.281:2664-5545	-2.72681	RCA	ATPase family associated with various cellular activities (AAA) rubisco activase
MDP0000127750	MDC013396.400:1704-2232	1.79769+308	AT5G06280.1	
MDP0000791483	MDC013398.12:1975-2220	1.79769+308	AT5G05780.1	AE3.ATHMOV34.RPN8A
0	MDC013436.578:2-321	4.86954		RP non-ATPase subunit 8A
MDP0000197294	MDC013447.197:2467-3134	-2.37931	ZCF37	ZCF37
MDP0000330267	MDC013483.919:9906-10138	1.79769+308	AT1G51720.1	Amino acid dehydrogenase family protein
MDP0000242107	MDC013483.920:693-11036	1.79769+308	AT3G21295.1	Tubulin-Pi/W-Pi/NBT superfamily protein
MDP0000240424	MDC013503.290:1841-10868	-3.89521	PBP1	pinacid-binding protein 1
MDP0000202103	MDC013530.341:3610-9556	2.12598	DGL1	dolichyl-diphosphooligosaccharide-protein glycosyltransferase 48kDa subunit family protein
0	MDC013531.194:13169-13505	-1.68373	PIP2D. PIP2.5	plasma membrane intrinsic protein 2.5
MDP0000129558	MDC013560.287:995-1943	2.54815	BPS1	Protein of unknown function (DUF793)
MDP0000278612	MDC013694.297:8579-8946	-2.19876	PET1	plastocyanin 1
MDP0000295511	MDC013737.149:3234-48180	-2.49478	AGT1	Argonate family protein
MDP0000293269	MDC013748.450:1014-3320	-2.4209	AT1G23740.1	Oxidoreductase, zinc-binding dehydrogenase family protein
0	MDC013772.153:26501-26780	1.79769+308		
MDP0000292908	MDC013792.490:2156-2412	1.79769+308	AT1G11300.1	protein serine/threonine kinases;protein kinases;ATP binding;sugar binding;kinases;carbohydrate binding
MDP0000613481	MDC013811.289:5939-6141	1.79769+308	AT3G11620.2	protein serine/threonine kinases;protein kinases;ATP binding;sugar binding;kinases;carbohydrate binding
0	MDC013818.335:4169-4688	3.85997	AT-SYR1.ATSYP121.ATSYR1.1	synaptin of plants 121
MDP0000852436	MDC013883.433:28953-29243	1.79769+308	NLP1. ATNLP1. CPA	nitrilase-like protein 1
MDP0000801806	MDC013898.320:3711-4586	1.93167	AT4G14305.1	Peroxisomal membrane 22 kDa (Mpv17/PMP22) family protein
MDP0000300051	MDC013941.232:17328-17757	1.79769+308	AT2G44310.1	Calcium-binding EF-hand family protein
0	MDC013941.240:13812-14241	1.79769+308	AT2G44310.1	Calcium-binding EF-hand family protein
0	MDC013955.368:6283-6564	1.78501		
0	MDC013969.325:6821-6931	1.79769+308		
MDP0000321180	MDC013970.243:6073-9465	-2.361	AT4G27310.1	B-box type zinc finger family protein
MDP0000328448	MDC013970.243:6073-9465	-2.18489		
0	MDC014001.354:28948-29441	3.47093		
MDP0000199273	MDC014010.337:25823-32224	3.30595	AT1G70710.1	ATGH9B1.CEL1.GH9B1
MDP0000232028	MDC014064.227:18740-19212	1.79769+308	AT4G14290.1	q/cycosyl hydrolase 9B1
MDP0000299402	MDC014069.193:12100-15622	1.98623	FPS1	alpha/beta-Hydrolases superfamily protein
0	MDC014100.85:6143-6452	1.79769+308		farnesyl diphosphate synthase 1
MDP0000295950	MDC014142.468:6824-9069	-2.19289	ALF5	MATE eflux protein
MDP0000394638	MDC014145.337:859-1071	1.79769+308	AT1G68320.1	AIMYB62.BW62B.BW62C.MYB
MDP0000151848	MDC014183.458:6588-6948	1.79769+308		myb domain protein 62
MDP0000151871	MDC014183.335:19493-19720	1.79769+308	AT4G38960.1	B-box type zinc finger family protein
MDP0000380032	MDC014189.230:1500-31751	1.79769+308	ATPAP29.PAP29	B-type acid phosphatase 29
MDP0000296890	MDC015008.179:340-1209	1.79769+308	ATG09270.1	glutathione S-transferase TAU 8
0	MDC015025.46:19239-23920	2.28703	AT5G64010.1	
MDP0000242554	MDC015077.305:4104-4809	1.79769+308	CYP76C2	cytochrome P450, family 76, subfamily C, polypeptide 2
MDP0000128423	MDC015092.88:5088-9340	2.73401	ATMYC2.JAI1.JIN1.MYC2.RD2	Basic helix-loop-helix (bHLH) DNA-binding family protein
MDP0000537361	MDC015104.166:2087-5923	2.28599	AT2G04095.1	Alpha/beta hydrolase related protein
0	MDC015142.537:14989-16316	-1.39589	GER2	NAD(P)-binding Rossmann-fold superfamily protein
MDP0000141470	MDC015146.108:31720-32772	-1.98175	FLA7	FASCICLIN-like arabinogalactan 7
MDP0000199052	MDC015208.187:15605-15861	1.79769+308	EER4.TAF12B	Transcription initiation factor TFIID subunit A
MDP0000886138	MDC015262.201:26347-28588	1.79769+308	AT3G12170.1	Chaperone DnaJ-domain superfamily protein
MDP0000128562	MDC015272.259:4221-4401	1.79769+308	AT3G20502.1	K+ uptake transporter 3
MDP0000292846	MDC015328.176:6704-8094	3.222	AT2G41380.1	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000911067	MDC015329.200:5868-6237	4.48568	MLP423	MLP-like protein 423
MDP0000214111	MDC015334.66:3117-33830	-2.13953	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
MDP0000642821	MDC015370.131:7512-9083	2.85117	AGP16.ATAGP16	Transducin/WD40 repeat-like superfamily protein
MDP0000804928	MDC015465.154:6369-6596	1.89734	AT5G50230.1	
MDP0000211726	MDC015524.135:32477-32885	2.39618	AT1G29290.1	
0	MDC015555.52:35553-37271	-3.57441	AT3G25570.1	Adenosylmethionine decarboxylase family protein
MDP0000740648	MDC015598.269:485-888	1.79769+308	AT1G76100.1	PETE1
MDP0000361550	MDC015573.110:11769-12270	-2.10837		plastocyanin 1
MDP0000301453	MDC015614.99:996-8975	2.76432	AT4G36760.1	aminopeptidase P1
MDP0000926531	MDC015688.120:16939-18822	1.79769+308	OL12	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
0	MDC015710.110:1669-1846	1.79769+308		
MDP0000622590	MDC015714.229:27931-31776	2.17217	AT2G41690.1	AT-HSF33.HSF3B
MDP0000511014	MDC015753.354:8942-11096	-2.69683		heat shock transcription factor B3
0	MDC015771.323:788-1107	1.79769+308		
MDP0000305934	MDC015800.101:15993-16548	-1.96377	AT1G31910.1	GHMP kinase family protein
MDP0000304497	MDC015808.201:229-1821	-2.18938	AT1G47960.1	cell wall / vacuolar inhibitor of fructosidase 1
0	MDC015817.135:987-1875	2.75131	AT5G38760.1	Late embryogenesis abundant protein (LEA) family protein
MDP0000207654	MDC015828.56:17681-17876	1.79769+308	AT2G20650.1	RING-U-box superfamily protein
MDP0000304369	MDC015831.96:1977-2271	-2.01267	LTP3	lipid transfer protein 3
MDP0000575886	MDC015856.331:10564-10900	1.79769+308	ATPDAT.PDAT.PDAT1	phospholipid:diacylglycerol acyltransferase
MDP0000205899	MDC015861.207:6372-7099	-3.13665	AGP16.ATAGP16	arabingalactan protein 16
MDP0000214320	MDC015872.319:12837-13304	4.62441	AT5G42905.1	Polynucleotidyl transferase, ribonuclease H-like superfamily protein
0	MDC015872.319:14910-15332	1.79769+308		
MDP0000242922	MDC015883.197:6246-9638	2.11224	AT5G25560.2	CHY-type/CTCHY-type/RING-type Zinc finger protein
0	MDC015908.225:5190-525			

MDP0000230446	MDC016069.260.8663-10840	1.79769e+308	AT5G32440.3		Ubiquitin system component Cue protein
MDP0000307358	MDC016071.225.7688-8061	1.79769e+308	AT5G64940.1	ATATH13,ATH13,ATOSA1,OS1	ABC2 homolog 13
MDP0000603546	MDC016163.86.1323-5672	3.30868	AT4G17880.1		Basic helix-loop-helix (bHLH) DNA-binding family protein
MDP0000150985	MDC016175.155.5520-8999	1.79769e+308	AT1G80420.1	ATXRCC1	BRCT domain-containing DNA repair protein
0	MDC016234.268.187-19347	1.9385			
0	MDC016234.268.1975-19922	1.79769e+308			
0	MDC016257.132.1244-1326	1.79769e+308	AT5G07050.1		nodulin MN21/EamA-like transporter family protein
0	MDC016257.197.16577-16693	2.51199			
MDP0000214905	MDC016257.212.5600-8375	1.79769e+308	AT2G38740.1		Halooxid dehalogenase-like hydrolase (HAD) superfamily protein
MDP0000151417	MDC016323.148.1568-3293	-3.4835	AT3G25570.1		Adenosylmethionine decarboxylase family protein
MDP0000348327	MDC016409.316.14506-15265	-1.85887	AT1G12663.1		
MDP0000332786	MDC016470.67.22850-23923	3.16876	AT5G04200.1	AIMC9,MC9	metacaspase 9
MDP0000332786	MDC016470.67.24078-24292	1.79769e+308	AT5G04200.1	AIMC9,MC9	metacaspase 9
0	MDC016479.97.23574-23902	1.79769e+308			
MDP0000432402	MDC016525.50.1237-1421	1.79769e+308	AT5G38830.1		Cysteine ⁵ -tRNA synthetase, class Ia family protein
MDP0000303139	MDC016572.135.2036-13919	2.64572	AT5G13560.1		
0	MDC016588.101.11842-12103	1.79769e+308			
MDP0000243237	MDC016615.207.310-1511	1.79769e+308	AT5G17820.1		Peroxidase superfamily protein
MDP0000903267	MDC016626.388.1735-2929	-1.99629	AT2G37400.1		Tetratricopeptide repeat (TPR)-like superfamily protein
0	MDC016663.136.1126-1407	1.79769e+308			
MDP0000817718	MDC016670.201.4492-4801	1.79769e+308	AT5G63610.1	ATCDK8,CDKE1,1;HEN3	cyclin-dependent kinase E.1
MDP0000206461	MDC016676.357.6049-7681	-2.02641	AT5G50790.1		Nodulin MN3 family protein
0	MDC016716.178.15966-16452	-1.91239			
0	MDC016737.180.344-544	1.79769e+308			
0	MDC016762.98.221-475	1.79769e+308			
MDP0000213265	MDC016787.195.6162-9680	1.79769e+308	AT1G07960.1	ATPDL5-1,PDLS-1	PDH-like 5-1
MDP0000356415	MDC016842.248.4052-4349	1.79769e+308			
MDP0000823528	MDC016855.631.39541-39971	-1.94464	AT4G27360.1		Dynein light chain type 1 family protein
MDP0000828077	MDC016904.89.2263-15477	2.31888	AT4G01470.1	AT1TIP1.3,GAMMA-TIP3,TIP1.3	topogast intrinsic protein 1.3
MDP0000307237	MDC016923.355.240-870	1.94868	AT3G21760.1		UDP-Glucosyltransferase superfamily protein
MDP0000389969	MDC016942.263.1081-1165	1.79769e+308	AT4G35260.1	IDH1,IDH1	isocitrate dehydrogenase 1
MDP0000923628	MDC016948.79.12312-12459	-1.87881	AT3G57062.1		
MDP0000213179	MDC016970.176.123-435	-2.08908	AT5G65730.1	XTH6	xyloglucan endotransglucosylase/hydrolase 6
0	MDC017013.566.1819-2228	1.79769e+308	AT2G45220.1		Plant invertase/pectin methyltransferase inhibitor superfamily
0	MDC017013.566.2476-470	1.79769e+308	AT2G45220.1		Plant invertase/pectin methyltransferase inhibitor superfamily
0	MDC017013.566.514-1355	1.79769e+308	AT2G45220.1		Plant invertase/pectin methyltransferase inhibitor superfamily
0	MDC017021.252.2034-20684	1.79769e+308			
MDP0000304470	MDC017033.58.322-2820	2.05019	AT3G68654.1		Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein
MDP0000307402	MDC017035.467.27408-27827	3.78787	AT1G12650.1		
MDP0000244499	MDC017051.225.1369-1750	2.02915	AT5G42260.1	BGLU12	beta glucosidase 12
MDP0000215541	MDC017065.233.1015-1592	1.79769e+308			
MDP0000308097	MDC017091.105.21457-21821	1.79769e+308	AT2G04220.1		Plant protein of unknown function (DUF868)
MDP0000507003	MDC017117.184.9382-10816	2.94928	AT2G25060.1	AIENODL14,ENODL14	early nodulin-like protein 14
0	MDC017130.237.1246-1897	4.57898	AT1G18390.2		Protein kinase superfamily protein
0	MDC017130.237.6870	1.79769e+308			
MDP0000252890	MDC017137.174.6376-7583	-2.13152	AT5G38410.1		Ribulose biphosphate carboxylase (small chain) family protein
MDP0000243529	MDC017153.343.11521-14215	-2.09166	AT2G32670.1	ATVAMP725,VAMP725	vesicle-associated membrane protein 725
MDP0000513140	MDC017154.657.12553-12769	1.79769e+308	AT1G51190.1	PLT2	Integrase-type DNA-binding superfamily protein
MDP0000351526	MDC017237.222.14315-14834	-3.5073	AT2G45180.1		Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000301189	MDC017251.289.4484-5683	1.79769e+308	AT2G39490.1		F-box family protein
0	MDC017263.315.11030-11368	1.79769e+308			
MDP0000233640	MDC017324.278.8810-20137	7.32266	AT1G06720.1		P-loop containing nucleoside triphosphate hydrolases superfamily protein
MDP0000215301	MDC017325.138.24398-26864	1.79769e+308	AT5G63060.1		Sec14-like phosphatidylinositol transfer family protein
MDP0000755770	MDC017371.127.20493-20837	1.79769e+308			
MDP0000755770	MDC017371.127.21062-21293	1.79769e+308			
0	MDC017405.92.18343-18890	-1.91427			
MDP0000302905	MDC017443.214.7327-8900	1.79769e+308	AT5G13930.1	ATCHS,CHS,TT4	Chalcone and stilbene synthase family protein
0	MDC017450.136.8789-9531	1.79769e+308	AT3G16340.2	PDR1	halotolerant drug resistance 1
0	MDC017540.252.4477-45439	1.79769e+308	AT4G20620.1		FAD-binding Berberine family protein
0	MDC017562.408.111-463	2.53993			
MDP0000206473	MDC017564.90.2113-2470	4.62132	AT1G51920.1		histone H2A 7
MDP0000935120	MDC017578.59.5707-6257	-2.69309	AT5G27670.1	HTA7	
MDP0000696497	MDC017597.315.14051-19216	2.53574	AT5G53110.1		RING/U-box superfamily protein
MDP0000214697	MDC017636.116.419-6265	2.00073	AT2G28690.1		Protein of unknown function (DUF1635)
0	MDC017703.193.3809-3712	1.79769e+308			
MDP0000208899	MDC017766.81.3875-5414	1.79769e+308	AT5G13930.1	ATCHS,CHS,TT4	Chalcone and stilbene synthase family protein
0	MDC017818.70.8691-8779	1.79769e+308			
MDP0000130060	MDC017831.366.8068-8826	1.79769e+308	AT5G54580.1		RNA-binding (RRM/RBD/RNP motifs) family protein
MDP0000208137	MDC017843.86.3131-7274	3.95473	AT3G22560.1	MDG25, GdS2	galactinol synthase 2
MDP0000492382	MDC017850.196.7405-7687	1.79769e+308	AT3G53000.1	AIPP2-A15,PP2-A15	Protein of unknown function, DUF617
MDP0000305335	MDC017850.205.5561-9559	-1.74673	AT2G21990.1		Protein of unknown function, DUF617
MDP0000243861	MDC017880.286.5763-5960	1.79769e+308	AT2G28930.3	APK1B,PK1B	protein kinase 1B
MDP0000708692	MDC017895.316.14102-16075	1.79769e+308	AT2G38470.1	ATWRKY33,WRKY33	WRKY DNA-binding protein 33
0	MDC017935.299.4662-5032	4.08188	AT1G30700.1		FAD-binding Berberine family protein
0	MDC018035.72.1243-1306	-2.78512			
MDP0000261968	MDC018046.125.7237-81764	3.09387	AT3G07790.1		DGCR14-related
MDP0000306151	MDC018097.432.5006-5477	6.62325	AT2G23270.1		amino acid permease 8
0	MDC018101.293.13762-13915	1.79769e+308	AT1G10010.1	AAP8,ATAAP8	Protein of unknown function (DUF581)
MDP0000732088	MDC018107.153.1030-1431	2.51332	AT5G13930.1	ATWRKY75,WRKY75	Protein kinase family protein with ARM repeat domain
MDP0000302888	MDC018131.78.74830-75022	1.79769e+308	AT2G4730.1		DUF679 domain membrane protein 2
MDP0000623836	MDC018185.243.10459-11068	2.77536	AT3G21550.1	MDIMP2,DIMP2	
0	MDC018197.265.11208-11227	1.79769e+308			
MDP0000794439	MDC018238.148.9568-11586	2.03383	AT1G80940.1	ATWRKY40,WRKY40	WRKY DNA-binding domain
MDP0000200727	MDC018262.284.13539-14255	1.79769e+308	AT3G22560.1		Acyl-CoA N-acyltransferases (NAT) superfamily protein
MDP0000210067	MDC018268.357.14874-17694	2.03795	AT2G14095.1		
MDP0000442718	MDC018328.126.1463-1767	1.79769e+308	AT4G14145.1		
0	MDC018333.136.493-815	1.79769e+308			
0	MDC018344.87.12851-13103	1.79769e+308			
MDP0000307191	MDC018367.267.12775-13673	4.45646	AT3G20840.1	PLT1	Integrase-type DNA-binding superfamily protein
0	MDC018370.363.15975-16396	1.79769e+308			
0	MDC018385.173.5099-5375	1.79769e+308			
MDP0000307797	MDC018399.342.13517-13812	2.72922	AT1G23880.1		NHL domain-containing protein
MDP0000244125	MDC018407.210.85-8962	1.79769e+308	AT1G01710.1		Acyl-CoA thioesterase family protein
MDP0000130449	MDC018419.403.1057-2419	1.87905	AT5G13610.1	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
MDP0000689946	MDC018430.130.8323-8938	2.19853	AT5G47220.1	ATERF-2,ATERF2,ERF2	ethylene response element binding factor 2
MDP0000152589	MDC018440.197.73746-74343	-3.28078	AT5G52190.1		Suaar isomerase (SIS) family protein
MDP0000341297	MDC018445.308.1656-1818	1.79769e+308			
0	MDC018495.75.656-1593	2.5851	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000905987	MDC018501.311.3900-4131	1.79769e+308	AT4G20310.1	ATRMA1,RMA1	RING membrane-anchored 1
MDP0000212954	MDC018507.307.11511-11932	1.79769e+308	AT1G70670.1		Calcium-related family protein
MDP0000789174	MDC018519.270.8935-7074	2.55974	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000569487	MDC018527.183.1987-3563	1.79769e+308			
0	MDC018532.136.875-1203	1.79769e+308	AT4G25340.2	FKBP53	FK506 BINDING PROTEIN 53
MDP0000626471	MDC018583.121.765-1036	1.79769e+308	AT1G72040.1		P-loop containing nucleoside triphosphate hydrolases superfamily protein
MDP0000210867	MDC018599.370.2113-2425	1.79769e+308			
MDP0000260882	MDC018600.265.28896-33820	1.97082			
MDP0000207774	MDC018610.106.7849-8953	-1.84235	AT3G20820.1		Leucine-rich repeat (LRR) family protein
MDP0000300795	MDC018638.210.32488-32798	1.79769e+308	AT1G76710.1	ASHH1,SDG26	SET domain group 26
0	MDC018683.391.5370-5442	1.79769e+308			
MDP0000206239	MDC018755.93.19644-21164	-2.26016	AT2G18840.1		Integral membrane Yip1 family protein
0	MDC018763.284.10-79	1.79769e+308			
MDP0000255006	MDC018763.300.9907-13402	1.79769e+308	AT3G01720.1		
MDP0000302026	MDC018797.53.4472-4733	-2.17361			
0	MDC018803.242.11-340	2.78501			
MDP0000306963	MDC018808.231.3422-3614	1.79769e+308	AT1G09630.1	ATRAB-A2A,ATRAB11C,ATRAL	RAB GTPase 11C
MDP0000523487	MDC018812.25.154-3502	1.93781	AT3G55120.1	AT1,CF1,TT5	Chalcone-flavanone isomerase family protein
MDP0000782882	MDC018829.211.2566-3010	2.05088			
0	MDC018888.178.25373-25918	2.18952	AT1G01490.2		Heavy metal transport/detoxification superfamily protein
0	MDC018888.178.4311-4783	1.79769e+308			
MDP0000304278	MDC018864.196.3981-5846	1.79769e+308	AT3G52040.1		VO motif-containing protein
MDP0000130738	MDC018913.57.3010-3796	1.79769e+308	AT1G68450.1		
MDP0000215667	MDC018916.143.5252-7355	1.79769e+308			
MDP0000210595	MDC018926.465.12630-16290	2.28894	AT1G03110.1		Transducin/WVD40 repeat-like superfamily protein
MDP0000304459	MDC018928.465.829-2636	1.49862	AT4G20310.1		RING membrane-anchored 1
MDP0000211459	MDC018944.121.4842-6638	1.79769e+308	AT1G19850.1	ARF5,IAA24,MP	Transcription factor B3 family protein / auxin-responsive factor AUX/IAA-related
MDP0000921319	MDC018952.103.18233-18583	-4.80994	AT2G10940.1		Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000921319	MDC018952.103.19128-19710	-4.48923	AT2G10940.1		Bifunctional inhibitor/lipid-transfer protein/seed storage 2

MDP0000827820	MDC019270.183.15826-16306	4.71788	AT1G24020.1	MLP423	MLP-like protein 423
0	MDC019296.227.19299-19915	-1.86788			
0	MDC019305.85.5690-5943	1.79769e+308			
MDP0000143208	MDC019350.189.9254-9942	1.79769e+308	AT5G08130.2	BIM1	basic helix-loop-helix (bHLH) DNA-binding superfamily protein
MDP0000221184	MDC019388.422.2599-3308	1.79769e+308	AT5G36930.2		Disease resistance protein (TIR-NBS-LRR class) family
MDP0000508081	MDC019411.248.5935-6349	1.79769e+308	AT2G44310.1		Calcium-binding EF-hand family protein
MDP0000696624	MDC019411.260.1762-2191	1.79769e+308	AT2G44310.1		Calcium-binding EF-hand family protein
MDP0000310308	MDC019445.155.6053-6213	1.79769e+308	AT2G06000.1		Pentapeptide repeat (PPR) superfamily protein
MDP0000322237	MDC019483.102.3700-11010	1.79769e+308	AT5G54570.1	BGLU41	beta glucosidase 41
MDP0000329499	MDC019532.134.1732-17472	2.48902			
MDP0000808038	MDC019575.15.12756-12778	2.06399	AT1G37340.1		UDP-Glycosyltransferase superfamily protein
MDP0000261679	MDC019580.344.3704-9984	3.62236	AT5G26340.1	ATSTP13,MSS1,STP13	Major facilitator superfamily protein
0	MDC019583.195.2352-2815	2.75015	AT2G37760.1		NAD(P)-linked oxidoreductase superfamily protein
0	MDC019583.195.3051-3246	2.41451	AT2G3770.2		NAD(P)-linked oxidoreductase superfamily protein
MDP0000449901	MDC019585.197.5929-9189	2.48902	AT1G19300.1		glyoxal oxidase-related protein
MDP0000449901	MDC019585.197.6197-7127	1.92507	AT1G19300.1		glyoxal oxidase-related protein
MDP0000315936	MDC019603.257.26665-27463	1.79769e+308	AT4G24990.1	ATGP4	Ubiquitin family protein
MDP0000311438	MDC019656.167.25590-27856	1.79769e+308	AT2G03620.1	MGT3,MRS2-5	magnesium transporter 3
MDP0000218810	MDC019661.283.3225-4682	4.53059	AT4G10490.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
0	MDC019710.194.14179-14423	2.21243			
MDP0000244775	MDC019719.227.864-1022	1.79769e+308	AT2G19330.1	P1RL6	plant intracellular ras group-related LRR 6
MDP0000230601	MDC019748.161.5809-7542	-2.15226	AT1G19000.1		Homeodomain-like superfamily protein
0	MDC019868.260.1962-2259	1.79769e+308			
MDP0000218699	MDC019865.222.5870-6995	2.2786	AT1G75000.1		Pathogenesis-related thaumatin superfamily protein
MDP0000362302	MDC019899.224.2519-2912	1.98336	AT4G14890.1		2Fe-2S ferredoxin-like superfamily protein
MDP0000593249	MDC020032.306.1846-8801	-1.28641	AT2G32300.1	UCC1	uclaycin 1
0	MDC020082.132.384-673	1.79769e+308			
0	MDC020082.224.15608-15824	1.79769e+308	AT1G66950.1	PDR11, ATPDR11	pleiotropic drug resistance 11
0	MDC020082.224.16228-16490	1.79769e+308	AT2G36380.1	PDR6, ATPDR6	pleiotropic drug resistance 6
0	MDC020082.224.16718-17136	1.79769e+308	AT2G36380.1	PDR6, ATPDR6	pleiotropic drug resistance 6
0	MDC020098.119.12808-13292	1.79769e+308	AT3G16340.2	PDR1	pleiotropic drug resistance 1
MDP0000412490	MDC020101.37.12007-12985	-3.44831	AT1G56430.1	ATNAS4,NAS4	nicotianamine synthase 4
MDP0000357039	MDC020112.161.5075-5343	1.79769e+308			
MDP0000705053	MDC020153.98.3960-4787	2.38023	AT1G48320.1		Thioesterase superfamily protein
MDP0000705053	MDC020153.98.5120-5424	1.79769e+308	AT1G48320.1		Thioesterase superfamily protein
MDP0000805832	MDC020185.100.13522-14211	-2.15482	AT5G08050.1		Protein of unknown function (DUF1118)
0	MDC020190.132.475-670	1.79769e+308			
MDP0000312316	MDC020206.60.19611-29042	6.42087	AT1G10510.1	emb2004	RNI-like superfamily protein
0	MDC020206.60.80379-80919	3.68653	AT1G348180.1		unknown protein
MDP0000362305	MDC020215.147.7355-7948	-1.90332	AT2G32970.1	LCR69,PDF2.2	low-molecular-weight cysteine-rich 69
MDP0000253928	MDC020235.55.5712-6463	-1.97256	AT5G64820.1		
MDP0000351308	MDC020252.154.3698-3890	1.79769e+308			
MDP0000745504	MDC020314.68.30613-30835	1.79769e+308	AT1G02630.1		Nucleoside transporter family protein
MDP0000593536	MDC020317.187.4775-2264	3.7415	AT2G3690.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000322725	MDC020357.143.7539-13113	1.98336	AT4G29010.1	AIM1	erythro-CoA hydratase/isomerase family
0	MDC020381.113.1178-2064	1.79769e+308			
MDP0000219404	MDC020461.201.992-1634	-3.43143	AT3G22142.1		Bi/functional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000366807	MDC020476.369.154-1863	2.415			
MDP0000520189	MDC020483.205.11374-11570	1.79769e+308	AT3G22310.1	ETR2	Signal transduction histidine kinase, hybrid-type, ethylene sensor
MDP0000356161	MDC020502.79.5346-6108	1.79769e+308	AT3G29970.1		B2D protein
MDP0000356161	MDC020502.79.6418-6639	1.79769e+308	AT3G29970.1		B2D protein
MDP0000392904	MDC020542.316.6274-6781	-1.89038	AT2G25770.1		Phytanoyl cyclase/dehydrase and lipid transport superfamily protein
MDP0000131822	MDC020582.164.1549-3880	1.79769e+308	AT4G05100.1	AIMYB74,MYB74	myb domain protein 74
MDP0000827665	MDC020641.127.10915-12751	-1.90145	AT5G41080.1		PLC-like phosphodiesterases superfamily protein
MDP0000353639	MDC020665.95.9842-9750	1.79769e+308			
MDP0000831481	MDC020665.117.8027-6473	2.9494	AT5G14280.1		DNA-binding storekeeper protein-related
MDP0000218132	MDC020684.226.11654-14980	1.79769e+308	AT3G15070.1		RING-U-box superfamily protein
MDP0000472203	MDC020837.138.583-9198	2.24942	AT5G18600.1		Thioredoxin superfamily protein
MDP0000311115	MDC020898.82.16235-16669	1.79769e+308	AT5G51270.1		U-box domain-containing protein kinase family protein
0	MDC020997.87.178-2245	1.79769e+308			
MDP0000215799	MDC021014.157.400-4861	1.79769e+308	AT1G50030.2	TOR	target of rapamycin
0	MDC021041.235.4758-5058	1.79769e+308			
MDP0000143860	MDC021083.97.4312-4666	1.79769e+308	AT4G15475.1		F-box/RN1-like superfamily protein
MDP0000374032	MDC021107.66.19990-21331	-2.88031	AT1G0740.1	RR23	inorganic carbon transport protein-related
MDP0000217690	MDC021125.222.7346-8108	1.79769e+308	AT2G32970.1	ATNHL10,NHL10, YL59	Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000758237	MDC021125.354.16615-17911	3.56375	AT5G01750.2		Protein of unknown function (DUF567)
MDP0000312359	MDC021195.261.14143-15009	2.1252	AT2G16060.1	AHB1,ARATH,GLB1,ATGLB1, hemoglobin 1	
0	MDC021221.287.44679-45111	2.02561			
MDP0000312258	MDC021224.329.1772-3627	1.79769e+308	AT1G79000.1	ATHAC-1,ATHPCAT2,HAC1,PC	histone acetyltransferase of the CBP family 1
MDP0000225981	MDC021224.329.4725-4845	1.72527	AT5G38300.1	ACYB-1,CYB-1	cytochrome B5E1-1
MDP0000313786	MDC021229.327.8915-15234	1.79769e+308	AT3G45300.1	ATIVD,IVD,IVDH	isovaleryl-CoA-dehydrogenase
MDP0000222305	MDC021262.501.3957-14057	1.79769e+308	AT3G15880.2	TPR4,WIP2	WUS-interacting protein 2
MDP0000221246	MDC021270.197.3504-5232	1.79769e+308	AT5G06710.1	HAT14	homeobox from Arabidopsis thaliana
MDP0000353721	MDC021379.127.3833-6939	1.79769e+308	AT1G02840.1	ATSRP34,SR1,SRP34	RNA-binding (RRM/RBD/RNP motifs) family protein
MDP0000261935	MDC021386.436.29757-30095	1.79769e+308			
MDP0000217124	MDC021421.104.11161-11618	2.97142	AT5G27460.1		Tetrapeptide repeat (TPR)-like superfamily protein
MDP0000142914	MDC021463.474.2997-5056	1.79769e+308	AT1G77930.1	MLP243	Chaperone DnaJ-domain superfamily protein
MDP0000342233	MDC021508.119.703-1183	2.05401	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000336734	MDC021521.150.2349-23882	-2.38109	AT1G78210.1	MSL6	mechanosensitive channel of small conductance-like 6
0	MDC021527.347.5167-5551	-2.40514			
MDP0000221871	MDC021555.260.3534-3862	1.79769e+308	AT4G20970.1		basic helix-loop-helix (bHLH) DNA-binding superfamily protein
0	MDC021563.286.640-1084	2.21243	AT5G37850.3	SOS4	pfK-like carbohydrate kinase family protein
0	MDC021563.301.16401-23355	2.03305	AT5G37850.1	SOS4,SOS4	pfK-like carbohydrate kinase family protein
MDP0000315449	MDC021594.1461.4-493	4.97147			
0	MDC021648.178.15444-17993	1.79769e+308	AT2G26070.1	RTS1	Protein of unknown function (DUF778)
MDP0000392201	MDC021658.157.9449-9957	-2.16656	AT1G60950.1	FED A, ATFD2	2Fe-2S ferredoxin-like superfamily protein
MDP0000313454	MDC021684.90.873-4447	-2.20956	AT3G20820.1		Leucine-rich repeat (LRR) family protein
MDP0000313454	MDC021689.441.3965-4557	5.51402	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000215269	MDC021689.443.8371-9851	4.3114	AT1G24020.1	MLP423	MLP-like protein 423
MDP000216907	MDC021689.444.11887-12520	4.4464	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000500806	MDC021689.444.7604-11877	1.79769e+308	AT1G24020.1	MLP423	MLP-like protein 423
MDP0000576126	MDC021691.154.2961-7337	-3.79609	AT5G38020.1		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDP0000314777	MDC021716.303.5439-6015	3.25986	AT3G21550.1	AIDMP2,DMP2	DUF679 domain membrane protein 2
MDP0000313600	MDC021763.143.53-117	-2.48985	AT4G37300.1	ME59	maternal effect embryo arrest 59
MDP0000764876	MDC021795.40.6148-6790	-3.43143	AT3G22142.1		Bi/functional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein
MDP0000542944	MDC021813.304.19401-20097	-1.88806	AT3G22840.1	ELIP,ELIP1	Chlorophyll A-B binding family protein
MDP0000132431	MDC021842.102.1393-3748	-2.43746	AT4G03210.1	XTH9	xyloglucan endotransglucosylase/hydrolase 9
MDP0000378203	MDC021843.194.2502-4873	-2.1428	AT4G03210.1	XTH9	xyloglucan endotransglucosylase/hydrolase 9
MDP0001132456	MDC021864.218.4719-5925	1.85673	AT5G42650.1	AOS,CYP74A,DDE2	allene oxide synthase
MDP0000574556	MDC021880.120.18168-18768	2.79716	AT5G39670.1		Calcium-binding EF-hand family protein
MDP0000142675	MDC021907.185.4850-5618	1.79769e+308			
MDP0000361589	MDC021912.336.80015-80513	-2.59832	AT3G45980.1	H2B,HTB9	Histone superfamily protein
MDP0000309894	MDC021925.367.9645-18947	2.03349	AT4G34640.1	ERG9,SQS1	squalene synthase 1
MDP0000312665	MDC021956.140.1760-30598	1.79769e+308	AT5G0600.1	UBF12	ubiquitin-specific protease 12
MDP0000701077	MDC022002.97.2723-4463	-2.10433	AT1G05850.1	ATCTL1,CTL1,ELP,ELP1,ERH2	Chitinase family protein
MDP0000245720	MDC022027.142.3660-5484	1.79769e+308	AT1G52800.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000261346	MDC022047.116.7935-11907	-3.22425	AT2G28900.1	ATOEP16-1,ATOEP16-1,OE1P1	outer plastid envelope protein 16-1
MDP0000219282	MDC022049.136.3911-5363	-3.07805	AT3G16520.3	UGT88A1	UDP-glucosyl transferase 88A1
MDP0000216076	MDC022049.144.1863-2445	-2.8847	AT3G16520.3	UGT88A1	UDP-glucosyl transferase 88A1
0	MDC022084.259.9269-9540	1.79769e+308			
0	MDC022115.179.2130-2784	1.76737	AT5G06320.1	NHL3	RDR1/HIN1-like 3
MDP0000245757	MDC022126.96.1332-1713	3.48619	AT1G72960.1		Root hair defective 3 GTP-binding protein (RHD3)
MDP0000309512	MDC022131.36.462-5980	1.79769e+308	AT5G03290.1	IDH-V	isocitrate dehydrogenase V
MDP0000389769	MDC022151.329.8991-9309	2.43417	AT2G37400.1	ATPAL1,PAL1	PhE ammonia lyase 1
MDP0000132621	MDC022159.201.1198-1649	4.00098	AT5G43580.1		Serine protease inhibitor, potato inhibitor I-type family protein
MDP0000699845	MDC022200.129.11651-13693	1.90489			
MDP0000309382	MDC022203.80.8540-9550	2.21842	AT5G13180.1	ANAC083,NAC083,VNI2	NAC domain containing protein 83
MDP0000223410	MDC022296.98.32919-34391	1.79769e+308	AT5G25170.1		PPPDE putative thiol peptidase family protein
MDP0000400098	MDC022327.232.13220-15870	-2.69487	AT3G11910.1	UBP13	ubiquitin-specific protease 13
MDP0000328060	MDC022301.307.90-353	1.79769e+308	AT5G61510.1		GrxE5-like zinc-binding alcohol dehydrogenase family protein
0	MDC022363.241.6084-6289	1.79769e+308			
0	MDC022366.63.24207-24828	3.6344	AT5G13220.4		

MDP0000308875	MDC022879.64:8443-8780	1.79769e+308	AT5G10360.1	EMB3010, RPS6B	Ribosomal protein S6e
0	MDC022894.374:9989-10324	1.79769e+308			
MDP0000145050	MDC023085.39:1191-3316	1.79769e+308	AT2G31180.1	ATMYB14, MYB14, MYB14AT	myb domain protein 14
MDP0000154734	MDC023147.45:4964-7678	2.37369	AT5G13080.1	ATWRKY75, WRKY75	WRKY DNA-binding protein 75
MDP0000144280	MDC023308.53:6102-7273	1.79769e+308	AT1G35210.1		
MDP0000344130	MDC023311.35:7749-8338	1.72265			
MDP0000655939	MDC023492.75:33-679	3.53624	AT3G54420.1	ATCHITIV, ATEP3, CHIV, EP3	homolog of carrot EP3-3 chitinase
MDP0000310109	MDC023507.55:3458-7466	2.57308	AT4G01560.1	MEE49	Ribosomal RNA processing Brix domain protein
MDP0000824468	MDC023572.35:3291-4882	1.79769e+308	AT1G02120.1	VAD1	GRAM domain family protein
0	MDC023578.53:1279-1667	-2.75104			
MDP0000769652	MDC023607.46:9470-10046	4.48219	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000229468	MDC023757.22:743-2304	2.00331	AT5G36110.1	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
MDP0000767063	MDC023849.16:6797-7283	1.79769e+308	AT1G35210.1		
MDP0000390049	MDC023913.71:5802-6066	2.65704	AT1G34060.1		Pyridoxal phosphate (PLP)-dependent transferases superfamily protein
MDP0000254078	MDC024051.25:30601-30826	1.79769e+308	AT5G36080.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000316310	MDC024251.13:2237-3536	2.97323	AT1G78860.1		D-mannose binding lectin protein with Apple-like carbohydrate-binding domain
MDP0000254057	MDC024467.18:10070-10976	1.79769e+308	AT2G27770.1		Plant protein of unknown function (DUF868)
0	MDC024785.32:20131-20658	1.79769e+308			
MDP0000229958	MDC025025.28:2836-3810	-4.49642	AT5G15230.1	GASA4	GAST1 protein homolog 4
MDP0000226405	MDC025032.16:6902-7125	1.79769e+308	AT1G02400.1	ATGA20X4, ATGA20X6, DTA1.1	qabbrellin 2-oxidase 6
MDP0000316472	MDC025128.19:896-2663	1.79769e+308			
0	MDC025179.21:23-403	1.79769e+308			
MDP0000226193	MDC025338.53:10778-16491	1.79769e+308	AT5G50400.1	ATPAP27, PAP27	purple acid phosphatase 27
0	MDC025463.22:3749-4156	-3.07297			
MDP0000318256	MDC025619.11:2890-10293	1.79769e+308	AT1G73050.1		Glucose-methanol-choline (GMC) oxidoreductase family protein
MDP0000318069	MDC025702.20:9270-10841	2.65117	AT5G36110.1	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
0	MDC026144.28:2897-3346	-1.97344			
MDP0000229338	MDC026688.7:88-304	2.13927	AT5G36110.1	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
MDP0000316181	MDC027100.17:2594-7236	1.79769e+308	AT1G51740.1	ATSYR81, ATUFE1, SYP81, UFE	syntaxin of plants 81
MDP0000133520	MDC027330.55:6328-8747	1.79769e+308	AT2G28560.1	PLA1A, PLA2A, PLP2	phospholipase A 2A
MDP0000228673	MDC027343.22:8537-10521	-1.88286	AT5G25610.1	ATRD22, RD22	BURP domain-containing protein
0	MDC027439.4:1106-2173	1.79769e+308			
0	MDC027586.25:17627-18649	3.74147	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
0	MDC027586.25:9596-10534	3.70896	AT3G54200.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDP0000229796	MDC028034.30:3013-5289	1.79769e+308	AT4G10490.1		2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein
MDP0000317816	MDC029025.16:37724-39632	-2.22916	AT5G01600.1	ATFER1, FER1	ferretin 1
MDP0000227827	MDC029110.8:34469-35629	-2.14091	AT2G03550.1		alpha/beta-Hydrolases superfamily protein
MDP0000246508	MDC029331.22:370-647	1.85922	AT2G15760.1		Protein of unknown function (DUF1645)
MDP0000228456	MDC029335.25:6007-7048	2.82399			
0	MDC029401.45:2819-2642	1.79769e+308			
0	MDC029428.27:19524-19555	1.79769e+308			
MDP0000357899	MDC029522.47:22578-23050	1.79769e+308			
MDP0000390563	MDC029522.47:26456-26678	1.79769e+308			
0	MDC029522.47:28375-29789	1.79769e+308			
MDP0000228257	MDC029541.17:30025-31667	-2.98044			
MDP0000782085	MDC029683.23:9115-9368	4.22898	AT5G15240.1		Transmembrane amino acid transporter family protein
0	MDC029690.2:317-603	1.79769e+308	AT3G04720.1	HELPR-4, PR4	pathogenesis-related 4
0	MDC031150.12:8267-8723	1.79769e+308	AT4G18160.1	KCO6, ATPK3, ATKCO6, TPK	Ca ²⁺ activated outward rectifying K ⁺ channel 6
MDP0000910895	MDC031261.10:30690-31071	1.79769e+308	AT5G11970.1		Protein of unknown function (DUF3511)
MDP0000316468	MDC032201.3:1004-1193	1.79769e+308			
MDP0000227463	MDC032660.9:5945-14498	6.5024	AT2G21440.1		RNA-binding (RRM/RBD/RNP motifs) family protein
MDP0000705797	MDC034940.5:2269-7814	-2.70526	AT4G30430.1	TET9	tetraspanin9
MDP0000595200	MDC035405.21:18653-18905	1.79769e+308	AT1G17810.1	BETA-TIP	beta-tongplast intrinsic protein
MDP0000661371	MDC035507.15:17028-17370	-2.3258	AT5G59320.1	LTP3	lipid transfer protein 3
MDP0000228904	MDC035513.7:3794-13224	4.85453	AT3G56400.1	ATWRKY70, WRKY70	WRKY DNA-binding protein 70
MDP0000761113	MDC035533.8:11708-13073	2.77336	AT2G14095.1		
MDP0000143463	MDC035751.16:12042-12657	4.53253	AT4G37290.1		
MDP0000143462	MDC035751.16:9288-9911	4.88732	AT4G37290.1		
0	MDC036102.13:6186-6377	1.79769e+308			
0	MDC036190.10:2148-2600	4.37625			
MDP0000859897	MDC037018.11:5057-5594	1.79769e+308	AT2G45760.1	BALBAP2	BON association protein 2
MDP0000478473	MDC037119.7:1598-3986	1.97805	AT5G36110.1	CYP716A1	cytochrome P450, family 716, subfamily A, polypeptide 1
0	MDC037361.9:6784-7143	1.79769e+308			
MDP0000836051	MDC037626.18:47629-48283	3.23594	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
0	MDC038019.6:878-1176	1.79769e+308			
MDP0000739955	MDC038611.7:8913-9138	4.66013			
MDP0000739957	MDC038611.7:9423-12725	1.79769e+308			
MDP0000229364	MDC039821.7:261-870	3.78343	AT1G24020.1	MPL423	MPL-like protein 423
0	MDC039927.8:6532-7016	1.79769e+308	AT5G45230.1		Disease resistance protein (TIR-NBS-LRR class) family
MDP0000317158	MDC039977.12:10248-22411	-1.92458	AT2G42990.1		GDSL-like Lipase/Acylhydrolase superfamily protein
MDP0000627178	MDC039977.12:10248-22411	2.53116	AT3G11660.1	NHL1	NDR1/HIN1-like 1
MDP0000246775	MDC040311.10:4864-6142	1.95053	AT1G75800.1		Pathogenesis-related thaumatin superfamily protein
MDP0000635659	MDC041102.8:8881-9496	2.0994	AT1G17860.1		Kunitz family trypsin and protease inhibitor protein
MDP0000134064	MDC042253.3:3937-5643	1.79769e+308			
MDP0000345608	MDC043894.10:1318-1504	1.79769e+308			

Supplementary Table 2 BLASTx results of the significantly differentially expressed novel ORFs in *M. x domestica* in response to fire blight infection.

<i>M. domestica</i> locus	<i>A. thaliana</i> accession	<i>A. thaliana</i> name	Description
MDC000127.652:4251-4492	AT4G33720.1		CAP (Cysteine-rich secretory proteins, Antigen 5, and Pathogenesis-related 1 protein) superfamily protein
MDC000446.497:2613-3451	AT3G19615.1		unknown protein
MDC000455.144:3026-3468	AT4G24620.1	PGI1, PGI	phosphoglucose isomerase 1
MDC001441.272:13692-14163	AT5G43920.1		transducin family protein / WD-40 repeat family protein
MDC001471.424:93507-93619	AT2G29260.1		NAD(P)-binding Rossmann-fold superfamily protein
MDC001671.165:2805-2973	AT1G78380.1	ATGSTU19, GST8, GSTU19	glutathione S-transferase TAU 19
MDC001963.417:4816-4925	AT4G27250.2		NAD(P)-binding Rossmann-fold superfamily protein
MDC002322.251:26803-27928	AT4G11280.1	ACS6, ATACS6	1-aminocyclopropane-1-carboxylic acid (acc) synthase 6
MDC002431.300:11772-11965	AT5G19130.2		GPI transamidase component family protein / Gaa1-like family protein
MDC002799.293:2023-2423	AT2G29330.1	TRI	tropinone reductase
MDC003306.225:3010-3406	AT2G16850.1	PIP3B, PIP2:8	plasma membrane intrinsic protein 2:8
MDC003716.306:46958-47066	AT1G03260.1		SNARE associated Golgi protein family
MDC004097.232:8798-9675	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC004475.200:15597-16341	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC005490.240:8153-8416	AT5G66180.3		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDC005927.393:5902-6584	AT5G10830.1		S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
MDC006260.462:8079-8672	AT1G23440.1		Peptidase C15, pyroglutamyl peptidase I-like
MDC006289.408:7320-7584	AT2G45960.3	PIP1B, TMP-A, ATHH2, PIP1:2	plasma membrane intrinsic protein 1B
MDC006603.734:2300-2410	AT5G39110.1		RmlC-like cupins superfamily protein
MDC007088.513:4786-5156	AT5G24810.2		ABC1 family protein
MDC007581.595:2473-2576	AT4G28460.1		unknown protein
MDC007779.587:2989-3343	AT3G14630.1	CYP72A14	cytochrome P450, family 72, subfamily A, polypeptide 14
MDC007779.587:3489-4308	AT3G14680.1	CYP72A9	cytochrome P450, family 72, subfamily A, polypeptide 9
MDC008017.329:6473-7175	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC008031.166:8984-9384	AT3G60030.1	SPL12	squamosa promoter-binding protein-like 12
MDC008212.493:3616-4058	AT5G43180.1		Protein of unknown function, DUF599
MDC008216.318:26921-27156	AT4G20820.1		FAD-binding Berberine family protein
MDC008563.271:10114-10663	AT1G75620.1		glyoxal oxidase-related protein
MDC009139.374:7848-8934	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC009630.367:24050-24262	AT2G03810.4		18S pre-ribosomal assembly protein gar2-related
MDC009830.388:3008-4348	AT5G13930.1	CHS, TT4, ATCHS	Chalcone and stilbene synthase family protein
MDC010174.397:11633-14111	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC010474.340:3456-4185	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC010476.238:18498-19659	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC010912.583:5714-6300	AT2G36380.1	PDR6, ATPDR6	pleiotropic drug resistance 6
MDC010981.245:18382-19274	AT3G61510.1	ACS1, AT-ACS1	ACC synthase 1
MDC011449.97:11886-12570	AT2G18680.1		unknown protein
MDC011459.391:12253-12872	AT2G39210.1		Major facilitator superfamily protein
MDC011603.242:16362-17137	AT4G33720.1		CAP (Cysteine-rich secretory proteins, Antigen 5, and Pathogenesis-related 1 protein) superfamily protein
MDC011770.416:7739-8412	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC011773.84:2484-3065	AT2G23270.1		unknown protein
MDC012392.481:2083-2367	AT2G29420.1	ATGSTU7, GST25, GSTU7	glutathione S-transferase tau 7
MDC012392.481:2550-3061	AT3G09270.1	ATGSTU8, GSTU8	glutathione S-transferase TAU 8
MDC012733.121:11561-12529	AT4G11280.1	ACS6, ATACS6	1-aminocyclopropane-1-carboxylic acid (acc) synthase 6
MDC012900.215:12407-12925	AT5G01710.1		methyltransferases
MDC013340.296:1896-2851	AT5G66900.1		Disease resistance protein (CC-NBS-LRR class) family
MDC013531.194:13169-13505	AT3G54820.1	PIP2D, PIP2:5	plasma membrane intrinsic protein 2:5
MDC013863.433:28953-29243	AT2G27450.2	NLP1, ATNLP1, CPA	nitrilase-like protein 1
MDC015077.305:4104-4809	AT2G45570.1	CYP76C2	cytochrome P450, family 76, subfamily C, polypeptide 2
MDC015146.108:31720-32772	AT2G04780.2	FLA7	FASCICLIN-like arabinogalactan 7
MDC015272.259:4201-4401	AT3G02050.1	KUP3, ATKUP3, ATKT4	K+ uptake transporter 3
MDC015771.323:788-1107	AT1G39190.1		GHPM kinase family protein
MDC016234.268:19756-19922	AT5G07050.1		nodulin MtN21 / EamA-like transporter family protein
MDC017013.566:1815-2228	AT2G45220.1		Plant invertase/pectin methylesterase inhibitor superfamily
MDC017013.566:2346-2726	AT2G45220.1		Plant invertase/pectin methylesterase inhibitor superfamily
MDC017013.566:514-1355	AT2G45220.1		Plant invertase/pectin methylesterase inhibitor superfamily
MDC017130.237:1246-1897	AT1G18390.2		Protein kinase superfamily protein
MDC017450.136:8789-9313	AT3G16340.2	PDR1	pleiotropic drug resistance 1
MDC017540.252:44737-45439	AT4G20820.1		FAD-binding Berberine family protein
MDC017935.299:4662-5932	AT1G30700.1		FAD-binding Berberine family protein
MDC018101.293:13762-13915	AT1G10010.1	AAP8, AATAAP8	amino acid permease 8
MDC018495.75:656-1593	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC018532.136:875-1203	AT4G25340.2	FKBP53	FK506 BINDING PROTEIN 53
MDC018858.178:25373-25918	AT1G01490.2		Heavy metal transport/detoxification superfamily protein
MDC019060.82:24775-25363	AT1G01490.2		Heavy metal transport/detoxification superfamily protein
MDC019105.344:1605-2183	AT4G23160.1	CRK8	cysteine-rich RLK (RECEPTOR-like protein kinase) 8
MDC019583.195:2352-2815	AT2G37760.1		NAD(P)-linked oxidoreductase superfamily protein
MDC019583.195:3051-3246	AT2G37770.2		NAD(P)-linked oxidoreductase superfamily protein
MDC020082.224:15608-15824	AT1G66950.1	PDR11, ATPDR11	pleiotropic drug resistance 11
MDC020082.224:16228-16490	AT2G36380.1	PDR6, ATPDR6	pleiotropic drug resistance 6
MDC020082.224:16703-17360	AT2G36380.1	PDR6, ATPDR6	pleiotropic drug resistance 6
MDC020098.119:12808-13292	AT3G16340.2	PDR1	pleiotropic drug resistance 1
MDC020206.60:80379-80919	AT3G48180.1		unknown protein
MDC021555.260:3534-3862	AT4G20970.1		basic helix-loop-helix (bHLH) DNA-binding superfamily protein
MDC021563.286:640-1084	AT5G37850.3	SOS4	pKb-like carbohydrate kinase family protein
MDC021658.157:9449-9957	AT1G60950.1	FED A, ATPFD2	2Fe-2S ferredoxin-like superfamily protein
MDC022115.179:2130-2784	AT5G06320.1	NHL3	NDR1/HIN1-like 3
MDC022366.63:24207-24828	AT5G13220.4		jasmonate-zim-domain protein 10
MDC022531.114:4018-4893	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC022879.56:1375-1884	AT2G22420.1		Peroxidase superfamily protein
MDC027586.25:17627-18649	AT2G46150.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC027586.25:9596-10534	AT3G54200.1		Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
MDC031150.12:8267-8723	AT4G18160.1	KCO6, ATPPK3, ATKCO6, TPK3	Ca2+ activated outward rectifying K+ channel 6
MDC039927.8:6532-7016	AT5G45230.1		Disease resistance protein (TIR-NBS-LRR class) family

Supplementary Table 3 BLASTx results of all expressed (non-significant) novel ORFs in *M. x domestica*.

<i>M. domestica</i> locus	<i>A. thaliana</i> accession	PFAM	Panther	Clusters of c Enzyme cod	KEGG orthology	Description
MDC000047.154:15534-16428	AT5G10840.1	PF02990	PTHR10766	KOG1278		transmembrane 9 superfamily member, putative, expressed
MDC001087.439:6147-6450	AT5G20790.2					
MDC011504.316:3604-3768	AT5G56670.1	PF04758	PTHR12650	KOG0009	K02983	expressed protein
MDC011558.545:2913-3398	AT4G38840.1	PF02519			K14488	OsSAUR31 - Auxin-responsive SAUR gene family member, expressed
MDC011558.545:10592-11117	AT4G38840.1	PF02519			K14488	OsSAUR31 - Auxin-responsive SAUR gene family member, expressed
MDC011670.126:374-634	AT2G44620.1	PF00550	PTHR20863	KOG1748	1.6.5.3.1.6.98 K03955	acyl carrier protein, putative, expressed
MDC011700.243:1227-1605	AT5G08139.1	PF00097	PTHR22763	KOG1493		zinc finger, C3HC4 type domain containing protein, expressed
MDC011702.243:1833-2070	AT2G37660.1		PTHR14194	KOG1203		NAD dependent epimerase/dehydratase family protein, putative, expressed
MDC011702.243:3359-3717	AT2G37660.1		PTHR14194	KOG1203		NAD dependent epimerase/dehydratase family protein, putative, expressed
MDC011704.133:1724-2278	AT5G20680.3	PF03005				expressed protein
MDC011727.163:5647-5848	AT3G04730.1	PF02309				OsIAA30 - Auxin-responsive Aux/IAA gene family member, expressed
MDC011727.163:7232-7693	AT3G04730.1	PF02309				OsIAA30 - Auxin-responsive Aux/IAA gene family member, expressed
MDC011766.689:5483-5959	AT2G20142.1	PF01582				expressed protein
MDC011768.383:32501-33098	AT3G23920.1	PF01373				beta-amylase, putative, expressed
MDC011804.393:6327-6784	AT3G51670.1	PF03765,PF00650	PTHR23324	KOG1471		patellin protein, putative, expressed
MDC011809.297:12013-12383	AT3G44280.1					expressed protein
MDC011970.92:16025-16891	AT3G13920.4	PF00270,PF00271	PTHR10967	KOG0328		DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC011970.92:17409-17837	AT1G64270.2	PF00270,PF00271	PTHR10967	KOG0327	K03257	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC012057.108:18172-18502	AT1G11170.1	PF05212				lysine ketoglutarate reductase trans-splicing related 1, putative, expressed
MDC012065.78:5672-5927	AT1G79040.1	PF04725				photosystem II 10 kDa polypeptide, chloroplast precursor, putative, expressed
MDC012139.232:7565-8258	AT1G73100.1	PF02182,PF05033,PF00856	PTHR22884	KOG1082		histone-lysine N-methyltransferase, H3 lysine-9 specific SUVH1, putative, expressed
MDC001187.272:8633-8985	AT1G36050.2	PF07970	PTHR10984	KOG2667		endoplasmic reticulum-Golgi intermediate compartment protein 3, putative, expressed
MDC012149.217:8136-8679	AT1G48830.2	PF01251	PTHR11278	KOG3320		40S ribosomal protein S7, putative
MDC012246.289:9924-10344	AT2G30710.1	PF00566	PTHR22957	KOG1092		TBC domain containing protein, expressed
MDC012278.208:17918-18313	AT5G62790.2	PF02670,PF08436			1.1.1.267 K00099	1-deoxy-D-xylulose 5-phosphate reductoisomerase, chloroplast precursor, putative, expressed
MDC012291.307:22481-23638	AT2G16365.4	PF00646				expressed protein
MDC012304.216:7950-8423	AT1G05660.1	PF00295				polygalacturonase, putative, expressed
MDC012304.216:8670-9266	AT1G02790.1	PF00295			3.2.1.67 K01213	polygalacturonase, putative, expressed
MDC012329.239:6033-6692	AT5G05340.1	PF00141			1.11.1.7 K00430	peroxidase precursor, putative, expressed
MDC001207.483:41049-41732	AT1G16560.4	PF04080				per1-like family protein, putative, expressed
MDC012329.239:7209-7460	AT5G58390.1	PF00141	PTHR13148		1.11.1.7 K00430	peroxidase precursor, putative, expressed
MDC012329.239:7574-7771	AT5G58390.1	PF00141			1.11.1.7 K00430	peroxidase precursor, putative, expressed
MDC012329.239:8539-8816	AT5G05340.1	PF00141			1.11.1.7 K00430	peroxidase precursor, putative, expressed
MDC012329.239:18042-18170	AT2G30330.1	PF06320	PTHR13073	KOG3390		expressed protein
MDC012329.239:18286-18476	AT2G30330.1	PF06320	PTHR13073	KOG3390		expressed protein
MDC012392.517:8036-8280	AT1G78380.1	PF02798,PF00043	PTHR11260	KOG0406		glutathione S-transferase, putative, expressed
MDC012438.121:1208-1390	AT4G29260.1	PF03767				HAD superfamily phosphatase, putative, expressed
MDC012447.123:2145-2841	AT4G01370.1	PF00069	PTHR11295	KOG0660	2.7.11.24 K04371	CGMC_MAPKCMGC_2_ERK.14 - CGMC includes CDA, MAPK, GSK3, and CLKC kinases
MDC012491.393:4-602	AT3G14840.2	PF00560,PF11721,PF07714,PF00069	PTHR23258	KOG1187		receptor-like protein kinase 2, putative, expressed
MDC012491.394:7041-7535	AT3G14840.2	PF00560,PF11721,PF07714,PF00069	PTHR23258	KOG1187		receptor-like protein kinase 2, putative, expressed
MDC012594.475:10716-11062	AT4G04630.1	PF04520				DUF584 domain containing protein, putative, expressed
MDC012645.61:1423-1710	AT1G56700.2		PTHR23402	KOG4755		pyrrolidone-carboxylate peptidase, putative, expressed
MDC012725.448:862-977	AT5G11260.1	PF00170,PF07716	PTHR13301			bZIP transcription factor domain containing protein
MDC012817.629:817-1307	AT2G38000.1	PF00684			KOG2813	expressed protein
MDC012823.282:222-434	AT3G15690.2	PF00364	PTHR18866:SF1			
MDC012824.191:6532-7133	AT1G30330.2	PF02362,PF06507,PF02309				auxin response factor, putative, expressed
MDC012868.151:2447-3068	AT1G79200.1		PTHR18460			splicing factor, arginine/serine-rich 12, putative, expressed
MDC012916.334:10310-10713	AT3G21700.2	PF08477	PTHR11708	KOG1673		ras-related protein, putative, expressed
MDC012916.334:12813-13262	AT3G21700.1	PF08477	PTHR11708	KOG1673		ras-related protein, putative, expressed
MDC012916.334:13398-13687	AT1G05205.1					expressed protein
MDC012939.284:5004-5485	AT3G27090.1	PF10539	PTHR23230			N-rich protein, putative, expressed
MDC013003.189:32585-33033	AT3G49590.3	PF10033			KOG4573	expressed protein
MDC013090.275:11344-11505	AT3G57450.1					conserved hypothetical protein
MDC013096.127:33850-34454	AT1G15080.1	PF01569	PTHR10165	KOG3030		lipid phosphatase protein, putative, expressed
MDC013173.321:5324-5406	AT5G59840.1	PF00071,PF08477	PTHR11708	KOG0078	K07901	ras-related protein, putative, expressed
MDC013184.220:3935-4234	AT5G47030.1	PF02823	PTHR13822	KOG1758	3.6.3.14 K02134	ATP synthase delta chain, mitochondrial precursor, putative, expressed
MDC013211.128:15219-15773	AT5G12340.1					expressed protein
MDC001250.283:31328-31743	AT3G06740.1	PF00320	PTHR22949:SF3			expressed protein
MDC013254.184:26548-26887	AT5G28750.1	PF02416			K03116	mttA/Hcf106 family protein, putative, expressed
MDC013272.255:2408-2881	AT1G24440.1	PF00097				zinc finger, RING-type, putative, expressed
MDC013292.269:3429-3656	AT3G52930.1	PF00274	PTHR11627	KOG1557	4.1.2.13 K01623	fructose-bisphosphate aldolase isozyme, putative, expressed
MDC001262.252:30916-31314	AT4G13780.1	PF09334,PF01588	PTHR11946	KOG1247	6.1.1.10 K01874	methionyl-tRNA synthetase, putative, expressed
MDC013317.553:7451-7667	AT2G36630.1	PF01925	PTHR14255			membrane protein, putative, expressed
MDC013317.563:24791-24933	AT5G56670.1	PF04758	PTHR12650	KOG0009	K02983	expressed protein
MDC013338.153:2636-3071	AT1G18720.1	PF06127			KOG3292	YGL010w, putative, expressed
MDC013392.463:8-454	AT4G31130.1	PF06749				expressed protein
MDC001273.352:1230-1510	AT1G02680.1	PF02269	PTHR11380	KOG3901	K03127	transcription initiation factor IID, 18kD subunit family protein, expressed
MDC013426.256:1484-1797	AT1G33055.1					expressed protein
MDC013531.194:10446-10802	AT3G54820.1	PF00230	PTHR19139	KOG0223	K09872	aquaporin protein, putative, expressed
MDC013531.194:10944-11090	AT2G45960.3	PF00230	PTHR19139	KOG0223	K09872	aquaporin protein, putative, expressed
MDC013531.194:14302-14625	AT3G53420.2	PF00230	PTHR19139	KOG0223	K09872	aquaporin protein, putative, expressed
MDC013567.369:4887-5108	AT5G10700.1		PTHR11717	KOG3305		tyrosine phosphatase, putative, expressed
MDC013616.148:3703-3832	AT5G19140.2	PF12481,PF12504	PTHR11772			stem-specific protein TSJT1, putative, expressed
MDC013616.148:3970-4115	AT5G19140.1	PF12481,PF12504	PTHR11772			stem-specific protein TSJT1, putative, expressed
MDC013616.148:4213-4461	AT5G19140.2	PF12481,PF12504	PTHR11772			stem-specific protein TSJT1, putative, expressed
MDC013737.149:3896-4181	AT4G19645.2	PF03798	PTHR13439	KOG4561		transmembrane protein 56, putative, expressed
MDC001279.248:5742-6162	AT5G16010.1	PF02544	PTHR10556	KOG1638		3-oxo-5-alpha-steroid 4-dehydrogenase, putative, expressed

MDC013772.153:30323-30615	AT3G51100.3						expressed protein
MDC013796.456:5519-6034	AT3G22930.1	PF00036	PTHR23050	KOG0027		K13448	OsCam2 - Calmodulin, expressed
MDC013875.240:1656-1897	AT5G58240.1	PF01230	PTHR23089	KOG3379	3.6.1.29	K01522	histidine triad family protein, putative
MDC013883.433:41972-42740	AT2G27730.1						expressed protein
MDC013917.369:27861-28177	AT5G59970.1	PF00125	PTHR10484	KOG3467		K11254	Core histone H2A/H2B/H3/H4 domain containing protein, putative, expressed
MDC013978.597:11403-11729	AT5G03810.1	PF00657	PTHR22835.SF27				GDSL-like lipase/acylhydrolase, putative, expressed
MDC013998.456:5517-5937	AT3G03000.1	PF00036	PTHR10891	KOG0027		K13448	OsCML11 - Calmodulin-related calcium sensor protein, expressed
MDC014084.122:12618-13135	AT3G04630.3	PF06886					seed specific protein Bn15D14A, putative, expressed
MDC014084.127:14385-14849	AT3G04630.3	PF06886					seed specific protein Bn15D14A, putative, expressed
MDC014088.189:7845-8126	AT3G21770.1	PF00141			1.1.1.1.7	K00430	peroxidase precursor, putative, expressed
MDC014115.478:5475-5892	AT3G21000.1		PTHR11439				
MDC000185.278:3219-3514	AT3G62880.2	PF02466					
MDC001325.99:2744-3063	AT1G11200.1	PF03619	PTHR23423	KOG2641			domain of unknown function domain containing protein, expressed
MDC014140.253:47-409	AT3G47640.3	PF00010					helix-loop-helix DNA-binding domain containing protein, expressed
MDC014231.203:16823-17997	AT2G36460.1	PF00274	PTHR11627	KOG1557	4.1.2.13	K01623	fructose-bisphosphate aldolase isozyme, putative, expressed
MDC015077.305:3146-3873	AT1G33730.1	PF00067	PTHR19383	KOG0156			cytochrome P450, putative, expressed
MDC015153.220:20005-20108	AT5G54580.1	PF00076	PTHR15241	KOG0114			RNA recognition motif containing protein, putative, expressed
MDC015183.122:8990-9049	AT5G47200.1	PF00071,PF08477	PTHR11708	KOG0084		K07976	ras-related protein, putative, expressed
MDC015226.470:54-427	AT5G36880.2	PF11930,PF00501	PTHR11968	KOG1175	6.2.1.1	K01895	AMP-binding enzyme, putative, expressed
MDC015226.508:6534-6780	AT2G18460.1	PF04367					protein of unknown function DUF502 domain containing protein, expressed
MDC015229.223:18448-18603	AT1G08830.2	PF00080	PTHR10003	KOG0441	1.15.1.1	K04565	copper/zinc superoxide dismutase, putative, expressed
MDC015291.262:409-673	AT4G18040.1	PF01652	PTHR11960	KOG1670		K03259	eukaryotic translation initiation factor, putative, expressed
MDC015300.124:5141-5526	AT4G00026.1	PF08294	PTHR13032	KOG4836			AGAP008572-PA, putative, expressed
MDC015306.223:5385-5889	AT1G25230.1	PF00149	PTHR10161	KOG2679			Ser/Thr protein phosphatase family protein, putative, expressed
MDC015317.38:1691-2088	AT2G19450.1	PF03062	PTHR10408	KOG0380	2.3.1.20,2.3.1	K11155	O-acyltransferase, putative, expressed
MDC015354.268:3980-4636	AT2G45260.1	PF04859					GLL1, putative, expressed
MDC015354.268:26756-27169	AT2G45240.1	PF01753,PF00557	PTHR10804	KOG2738	3.4.11.18	K01265	peptidase, M24 family protein, putative, expressed
MDC015354.268:30817-30986	AT2G45240.1	PF01753,PF00557	PTHR10804	KOG2738	3.4.11.18	K01265	peptidase, M24 family protein, putative, expressed
MDC015361.139:5122-6154	AT1G53910.3	PF00847					AP2 domain containing protein, expressed
MDC015361.232:11883-12412	AT4G17050.1	PF07883					cupin 2, conserved barrel domain protein, putative, expressed
MDC015377.320:8056-8386	AT1G16250.1	PF00646,PF07646,PF01344	PTHR23230				OsFBK22 - F-box domain and kelch repeat containing protein, expressed
MDC015388.349:245-728	AT2G33590.1	PF01370	PTHR10366	KOG1502			reductase, putative, expressed
MDC001370.310:10351-10720	ATMG00300.1		PTHR11439				
MDC015405.307:5999-6733	AT2G27730.1						expressed protein
MDC015405.307:11611-12008	AT2G27450.2	PF00795	PTHR23088	KOG0806			N-carbamoylputrescine amidase, putative, expressed
MDC015460.735:786-1170	AT3G17020.1	PF00582					universal stress protein domain containing protein, putative, expressed
MDC015489.206:24262-35335	AT4G12080.1	PF03479					AT hook motif domain containing protein, expressed
MDC015491.125:1309-1363	AT4G31300.3	PF00227	PTHR11599	KOG0174	3.4.25.1	K02738	peptidase, T1 family, putative, expressed
MDC015509.61:2649-2790	AT5G63160.1	PF00651,PF02135	PTHR23230	KOG1778			BTB22 - Bric-a-Brac, Tramtrack, and Broad Complex BTB domain with TAZ zinc finger and Calmodulin-binding domains, expressed
MDC015520.222:32010-33690	AT5G10770.1		PTHR13683	KOG1339			aspartic proteinase nepenthesin-2 precursor, putative, expressed
MDC015556.295:6786-7196	AT4G00030.1	PF04755					PAP fibrillin family domain containing protein, expressed
MDC015585.34:19739-20189	AT3G54280.2	PF02985,PF12054,PF00176,PF00271	PTHR10799	KOG0392			SNF2 family N-terminal domain containing protein, expressed
MDC015655.486:8519-9001	AT5G62200.1	PF06232					embryo-specific 3, putative, expressed
MDC015715.117:4672-5113	AT4G16580.1		PTHR12320	KOG1379			stage II sporulation protein E, putative, expressed
MDC015785.318:410-690	AT3G16080.1	PF01907	PTHR10768	KOG3475		K02922	ribosomal protein L37, putative, expressed
MDC015861.221:33780-34101	AT2G16430.2	PF00149	PTHR22953	KOG1378			purple acid phosphatase precursor, putative, expressed
MDC015884.83:20968-21098	AT1G50370.1	PF00149	PTHR11668	KOG0373	3.1.3.16	K01090	Ser/Thr protein phosphatase family protein, putative, expressed
MDC015884.83:23952-24093	AT3G19980.1	PF00149	PTHR11668	KOG0373	3.1.3.16	K01090	Ser/Thr protein phosphatase family protein, putative, expressed
MDC015884.83:25428-25873	AT3G19980.1	PF00149	PTHR11668	KOG0373	3.1.3.16	K01090	Ser/Thr protein phosphatase family protein, putative, expressed
MDC015885.118:3197-3618	AT1G15520.1	PF00005,PF01061,PF08370	PTHR19241	KOG0065			pleiotropic drug resistance protein, putative, expressed
MDC015885.118:3742-3985	AT1G15520.1	PF00005,PF01061,PF08370	PTHR19241	KOG0065			pleiotropic drug resistance protein, putative, expressed
MDC001441.272:2572-3023	AT3G04300.1	PF05899					enzyme of the cupin superfamily protein, putative, expressed
MDC015915.252:7548-9246	AT5G02500.1	PF00012	PTHR19375	KOG0100		K03283	DnaK family protein, putative, expressed
MDC016026.76:14360-14736	AT1G30580.1	PF01926,PF06071	PTHR23305	KOG1491		K06942	GTP-binding protein, putative, expressed
MDC016027.22:3681-3837	AT4G21105.1	PF02238					COX VIIa, putative, expressed
MDC016044.175:22582-23026	ATMG00310.1		PTHR19446				conserved hypothetical protein
MDC001441.272:13137-13500	AT5G43920.1	PF00400	PTHR22838	KOG0293			WD repeat-containing protein, putative, expressed
MDC016050.65:24-224	AT3G51000.1	PF12146,PF00561	PTHR10992	KOG4178			hydrolase, alpha/beta fold family domain containing protein, expressed
MDC016095.141:7510-7595	AT5G59840.1	PF00071,PF08477	PTHR11708	KOG0078		K07901	ras-related protein, putative, expressed
MDC016096.158:472-890	AT4G21490.1	PF07992,PF00070,PF00036	PTHR22915	KOG2495	1.6.99.3	K03885	NADH-ubiquinone oxidoreductase, mitochondrial precursor, putative, expressed
MDC016098.147:4891-5339	AT1G55280.1	PF03899					expressed protein
MDC000193.346:9537-9769	AT3G04400.2	PF00238	PTHR11761	KOG0901		K02894	ribosomal protein, putative, expressed
MDC016152.155:52339-52623	AT5G27760.1	PF04588					hypoxia-responsive family protein, putative, expressed
MDC016186.171:1006-1298	AT3G58970.1		PTHR13890	KOG2662			CorA-like magnesium transporter protein, putative, expressed
MDC016186.171:1596-2066	AT3G51890.1		PTHR10639				expressed protein
MDC001471.424:94139-94333	AT2G29170.1		PTHR19410				oxidoreductase, short chain dehydrogenase/reductase family domain containing protein, expressed
MDC016234.268:19514-19639	AT5G07050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC016234.268:20057-20273	AT5G07050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC016234.268:20680-20980	AT5G07050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC016261.58:2022-2456	AT4G21460.1	PF10213	PTHR13490.SF4				expressed protein
MDC016265.275:3809-5168	AT4G21990.1	PF01507,PF00085	PTHR18929	KOG0189	1.8.4.9	K05907	SNF1-related protein kinase regulatory subunit beta-1, putative, expressed
MDC016279.371:5166-5698	AT4G16360.3	PF04739	PTHR10343	KOG1616			iron-sulfur cluster assembly enzyme ISCU, mitochondrial precursor, putative, expressed
MDC016282.141:417-597	AT4G22220.1	PF01592	PTHR10093	KOG3361			expressed protein
MDC016368.213:31185-31562	AT5G24350.2	PF08314					cytochrome P450, putative, expressed
MDC001530.209:10977-11259	AT3G61040.1	PF00067	PTHR19383	KOG0156			reductase, putative, expressed
MDC016613.108:4593-5046	AT2G33590.1	PF01370	PTHR10366	KOG1502			ER lumen protein retaining receptor, putative, expressed
MDC016680.236:5904-6226	AT4G38790.1	PF00810	PTHR10585	KOG3106			auxin-induced protein 5NG4, putative, expressed
MDC001542.287:23512-23825	AT3G30340.1	PF00892					B4-BT4 - Bric-a-Brac, Tramtrack, Broad Complex BTB domain with B4 subfamily conserved sequence, expressed
MDC016719.244:7540-8369	AT5G41330.1	PF02214	PTHR11145	KOG2714			expressed protein
MDC016733.266:3079-3967	AT5G56670.1	PF04758	PTHR12650	KOG0009		K02983	expressed protein

MDC016767.549:526-899	AT1G21630.2	PF00036	PTHR11216	KOG0998		EF hand family protein, putative, expressed
MDC016767.586:2807-3215	AT1G21630.1	PF00036	PTHR11216	KOG0998		EF hand family protein, putative, expressed
MDC016797.262:982-1299	AT2G24860.1					tsi1-interacting protein TSIP1, putative, expressed
MDC001544.220:3084-3414	AT3G50440.1	PF00561	PTHR10992	KOG1454		OsPOP4 - Putative Prolyl Oligopeptidase homologue, expressed
MDC016994.91:1058-1430	AT5G58740.1	PF04969	PTHR12356	KOG2265		CS domain containing protein, putative, expressed
MDC001568.219:2517-2945	AT1G42960.1					expressed protein
MDC017149.109:416-866	AT3G17020.1	PF00582				universal stress protein domain containing protein, putative, expressed
MDC017149.109:1733-2403	AT3G36659.1	PF04043	PTHR22931.SF5			IWS1 homology A, putative, expressed
MDC017203.93:49693-51044	AT2G32070.1	PF04857	PTHR10797	KOG0304		CAF1 family ribonuclease containing protein, putative, expressed
MDC017207.68:1532-2126	AT2G01650.1	PF00096,PF09409,PF00789	PTHR23153	KOG2699	K14011	UBX domain containing protein, expressed
MDC017303.260:762-1075	AT1G11880.1	PF04188	PTHR12468	KOG2647	2.4.1.-	GPI mannosyltransferase 2, putative, expressed
MDC017303.263:3880-4185	AT1G11880.1	PF04188	PTHR12468	KOG2647	2.4.1.-	GPI mannosyltransferase 2, putative, expressed
MDC017342.179:6762-7645	AT1G04170.1	PF00009,PF03144,PF09173	PTHR23115	KOG0466		eukaryotic translation initiation factor 2 subunit gamma, putative, expressed
MDC001577.2956:23137-23237	AT3G52930.1	PF00274	PTHR11627	KOG1557	4.1.2.13	fructose-bisphosphate aldolase isozyme, putative, expressed
MDC017415.336:1875-2679	AT3G13275.1					
MDC017440.359:16037-16253	AT4G29230.1	PF02365				no apical meristem protein, putative, expressed
MDC001577.2956:23551-23754	AT5G03690.2	PF00274	PTHR11627	KOG1557	4.1.2.13	fructose-bisphosphate aldolase isozyme, putative, expressed
MDC017491.272:6014-6252	AT2G37660.1		PTHR14194	KOG1203		NAD dependent epimerase/dehydratase family protein, putative, expressed
MDC017491.272:7509-7862	AT2G37660.1		PTHR14194	KOG1203		NAD dependent epimerase/dehydratase family protein, putative, expressed
MDC017518.269:8615-8848	AT1G05190.1	PF00347	PTHR11655	KOG3254		ribosomal protein L6, putative, expressed
MDC017518.269:9967-10438	AT1G05190.1	PF00347	PTHR11655	KOG3254		ribosomal protein L6, putative, expressed
MDC017540.252:42046-42444	AT4G20840.1	PF01565,PF08031	PTHR11748			reticuline oxidase-like protein precursor, putative, expressed
MDC017540.252:45858-46351	AT5G44410.1	PF01565,PF08031				reticuline oxidase-like protein precursor, putative, expressed
MDC017548.358:6850-7605	AT2G09990.1	PF00380	PTHR21569	KOG1753		ribosomal protein, putative, expressed
MDC017550.46:15204-15624	AT5G59970.1	PF00125	PTHR10484	KOG3467		Core histone H2A/H2B/H3/H4 domain containing protein, putative, expressed
MDC000205.451:1016-1345	AT5G43600.1	PF01546,PF07687	PTHR11014			peptidase, putative, expressed
MDC001577.2956:23830-23966	AT3G52930.1	PF00274	PTHR11627	KOG1557	4.1.2.13	fructose-bisphosphate aldolase isozyme, putative, expressed
MDC017562.415:3865-4030	AT5G16400.1	PF00085	PTHR10438	KOG0907		thioredoxin, putative, expressed
MDC017562.415:5319-5607	AT3G02730.1	PF00085	PTHR10438	KOG0907		thioredoxin, putative, expressed
MDC017580.217:171-361	AT5G15780.1	PF01190				POE17 - Pollen Ole e 1 allergen and extensin family protein precursor, expressed
MDC017593.111:3812-4134	AT2G44650.1	PF00166	PTHR10772	KOG1641		chaperonin, putative, expressed
MDC017611.70:9398-9922	AT5G16790.1	PF05615	PTHR14854	KOG3215		THO complex subunit 7, putative, expressed
MDC017634.105:22460-22837	AT1G15000.1	PF00450	PTHR11802	KOG1282	3.4.16.-	K09645
MDC017693.122:6214-6551	AT5G44380.1	PF01565,PF08031	PTHR11748			OsSCP31 - Putative Serine Carboxypeptidase homologue, expressed
MDC017695.289:3392-3935	AT5G60580.4	PF00097	PTHR11748			berberine and berberine like domain containing protein, expressed
MDC017782.228:7791-8049	AT2G28710.1	PF12171,PF00096	PTHR23012	KOG1609		zinc finger, C3HC4 type, domain containing protein, expressed
MDC017817.273:3318-3686	AT5G07900.1	PF02536	PTHR11389			ZOS1-14 - C2H2 zinc finger protein, expressed
MDC017829.667:3457-3899	AT3G10250.2	PF09713		KOG1267		mTERF domain containing protein, expressed
MDC001605.331:9735-10084	AT5G10770.1		PTHR13683	KOG1339		plant-specific domain TIGR01589 family protein, putative, expressed
MDC017981.251:962-1158	AT3G48850.1	PF00153	PTHR11896	KOG0767		aspartic proteinase nepenthesin-2 precursor, putative, expressed
MDC001627.237:2537-2717	AT1G07440.2	PF00106	PTHR19410	KOG0725		phosphate carrier protein, mitochondrial precursor, putative, expressed
MDC018008.230:9938-10349	AT2G37840.2		PTHR22982		2.7.11.1	K08269
MDC018009.138:415-646	AT5G37710.1	PF03893,PF01764	PTHR21493	KOG2088		oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC018060.144:425-941	AT2G25700.1	PF03931,PF01466	PTHR11165	KOG1724		CAMK_CAMK_like_ULKk_APGy2 - CAMK includes calcium/calmodulin dependent protein kinases, expressed
MDC001627.237:2998-3224	AT2G29350.3	PF00106	PTHR19410	KOG0725		calmodulin-binding heat-shock protein, putative, expressed
MDC018073.537:1656-1915	AT5G65550.1		PTHR11926	KOG1192		SKP1-like protein 1B, putative, expressed
MDC018073.590:292-852	AT5G65550.1		PTHR11926	KOG1192		oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC018099.109:12995-13315	AT3G17820.1	PF03951,PF00120	PTHR20852	KOG0683	6.3.1.2	K01915
MDC018139.149:19551-19623	AT4G34700.1	PF05347	PTHR12868	KOG3466	1.6.5.3.1.6.99	K03965
MDC018160.157:3495-3833	AT2G16850.1	PF00230	PTHR19139	KOG0223		K09872
MDC018160.157:3922-4062	AT5G60660.1	PF00230	PTHR19139	KOG0223		K09872
MDC001627.237:4701-5152	AT2G29330.1	PF00106	PTHR19410	KOG0725	1.1.1.206	K08081
MDC018160.157:4161-4370	AT4G35100.2	PF00230	PTHR19139	KOG0223		K09872
MDC018160.157:4570-4823	AT2G16850.1	PF00230	PTHR19139	KOG0223		K09872
MDC018334.222:6621-6929	AT2G46070.2	PF00069,PF07714	PTHR11295	KOG0660	2.7.11.24	K04371
MDC018355.124:5469-5749	AT2G32950.1	PF00097,PF00400	PTHR22847	KOG0265	6.3.2.19	K10143
MDC018359.70:1069-1579	AT2G02230.1	PF00646				CGMC_MAPKCMGC_2_ERK.13 - CGMC includes CDA, MAPK, GSK3, and CLKK kinases, expressed
MDC018409.250:3724-4557	AT2G09990.1	PF00380	PTHR21569	KOG1753		K02960
MDC018412.103:26641-27151	AT3G01360.2	PF04819				OsFBX70 - F-box domain containing protein, expressed
MDC018491.206:16889-17230	AT5G11110.1	PF08550,PF00534	PTHR12526	KOG0853		ribosomal protein, putative, expressed
MDC018507.307:20436-20547	AT1G32260.1	PF00179	PTHR11621	KOG0896		K10704
MDC018507.307:20621-20737	AT2G36060.3		PTHR11621	KOG0896		K10704
MDC018507.307:20888-21033	AT1G32260.1	PF00179	PTHR11621	KOG0896		K10704
MDC018556.272:150-522	AT5G11760.1	PF08576				expressed protein
MDC001661.298:30577-31330	AT1G01980.1	PF01565,PF08031				reticuline oxidase-like protein precursor, putative, expressed
MDC018580.424:39-984	AT3G58030.4	PF00097	PTHR12313	KOG0823		zinc finger, C3HC4 type domain containing protein, expressed
MDC018648.267:14763-15015	AT3G44260.1	PF04857	PTHR10797	KOG0304		CAF1 family ribonuclease containing protein, putative, expressed
MDC018648.267:15175-15555	AT3G44260.1	PF04857	PTHR10797	KOG0304		CAF1 family ribonuclease containing protein, putative, expressed
MDC018667.247:1783-1896	AT4G23880.1					
MDC001665.416:2559-2944	AT4G38020.1	PF00588	PTHR12029	KOG2506		RNA methyltransferase, TrmH family protein, putative, expressed
MDC018728.83:12896-13234	AT3G05545.1	PF00097	PTHR22766			zinc finger, C3HC4 type domain containing protein, expressed
MDC018728.83:23735-24128	AT3G05530.1	PF07728,PF00004	PTHR23073	KOG0652		K03065
MDC018728.83:24253-24390	AT3G05530.1	PF07728,PF00004	PTHR23073	KOG0652		K03065
MDC018728.83:24487-24595	AT3G05530.1	PF07728,PF00004	PTHR23073	KOG0652		K03065
MDC018744.264:10711-11303	AT2G30950.1	PF06480,PF07728,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	K03798
MDC018744.264:11400-11646	AT1G06430.1	PF06480,PF07728,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	K03798
MDC018820.163:4887-5031	AT1G67530.2	PF04564,PF00514	PTHR22849			OsFtsH2 FtsH protease, homologue of AtFtsH2/8, expressed
MDC018837.177:26042-26469	AT5G41350.1	PF00097	PTHR22937			OsFtsH2 FtsH protease, homologue of AtFtsH2/8, expressed
MDC018870.194:4803-4978	AT2G33590.1	PF01370	PTHR10366	KOG1502		armadillo/beta-catenin repeat family protein, putative, expressed
MDC018977.108:28169-28577	AT3G13677.2					zinc finger, C3HC4 type domain containing protein, expressed
						reductase, putative, expressed
						expressed protein

MDC018995.224:13429-13760	AT4G30780.1						expressed protein
MDC019082.128:8813-9112	AT4G16500.1	PF00031					cysteine proteinase inhibitor 8 precursor, putative, expressed
MDC019091.216:2033-2693	AT5G21940.1						MTD1, putative, expressed
MDC019091.231:35553-36009	AT3G43860.1	PF00759	PTHR22298		3.2.1.4	K01179	endoglucanase, putative, expressed
MDC019095.63:22484-23000	AT5G09590.1	PF00012	PTHR19375	KOG0102		K03283	DnaK family protein, putative, expressed
MDC001766.131:11010-11410	AT4G32760.2	PF00790,PF03127	PTHR13856	KOG1087			VHS and GAT domain containing protein, expressed
MDC019117.269:5681-6073	AT4G13520.1						
MDC019147.46:9270-9569	AT1G54250.1	PF03870	PTHR10917	KOG3400		K03016	DNA-directed RNA polymerases I, II, and III subunit RPABC3, putative, expressed
MDC019238.44:5191-5727	AT5G18200.1		PTHR11943	KOG2958	2.7.7.12	K00965	galactose-1-phosphate uridylyl transferase, putative, expressed
MDC019339.84:8665-9426	AT2G22420.1	PF00141			1.1.1.7	K00430	peroxidase precursor, putative, expressed
MDC019360.344:23048-23730	AT3G59080.2		PTHR13683	KOG1339			aspartic proteinase nepenthesin precursor, putative, expressed
MDC019368.126:5277-5781	AT1G67265.1	PF08137					expressed protein
MDC019383.46:34094-34336	AT5G48070.1	PF00722,PF06955			2.4.1.207	K08235	glycosyl hydrolases family 16, putative, expressed
MDC019400.208:6391-6498	AT5G47930.1		PTHR11594	KOG1779		K02978	40S ribosomal protein S27, putative, expressed
MDC019454.54:10125-10559	AT5G14420.2	PF07002,PF00097	PTHR10857	KOG1327			copine, putative, expressed
MDC019461.80:27261-27542	AT5G52390.1	PF06521					
MDC019461.80:27755-28178	AT5G52390.1	PF06521					
MDC019484.38:4830-5300	AT2G39110.1	PF00069,PF07714	PTHR23258	KOG1187			protein kinase APK1A, chloroplast precursor, putative, expressed
MDC019522.115:11000-11388	AT5G11600.1						expressed protein
MDC001859.240:11026-11424	AT3G55070.1		PTHR12170	KOG0396			macrophage erythroblast attacher, putative, expressed
MDC019537.450:7236-7659	AT3G09700.1		PTHR12763	KOG0723			heat shock protein DnaJ, putative, expressed
MDC019598.191:5158-5543	ATMG00300.1		PTHR11439				
MDC019710.194:10352-10604	AT1G43650.2	PF00892					integral membrane protein DUF6 containing protein, expressed
MDC019710.194:11838-12171	AT1G43650.1	PF00892					integral membrane protein DUF6 containing protein, expressed
MDC019710.194:13383-13777	AT1G43650.1	PF00892					integral membrane protein DUF6 containing protein, expressed
MDC019720.430:2208-2873	AT5G24860.1						flowering promoting factor-like 1, putative, expressed
MDC001883.280:6135-6504	AT5G16790.1	PF05615	PTHR14854	KOG3215		K13176	THO complex subunit 7, putative, expressed
MDC019839.138:30491-30850	AT4G36130.1	PF00181,PF03947	PTHR13691	KOG2309		K02938	60S ribosomal protein L8, putative, expressed
MDC019846.92:3774-4356	AT5G44380.1	PF01565,PF08031	PTHR11748				berberine and berberine like domain containing protein, expressed
MDC019854.101:11089-11317	AT1G55740.1	PF05691					uncharacterized glycosyltransferase, putative, expressed
MDC019950.115:0-456	AT2G21110.1	PF03018	PTHR21495				dirigent, putative, expressed
MDC019959.138:16420-17121	AT2G44470.3	PF00232	PTHR21495	KOG0626	3.2.1.147	K01237	Os6glu24 - beta-glucosidase homologue, similar to G. max isohydroxyurate hydrolase, expressed
MDC020065.141:605-1042	AT2G39420.1	PF12146,PF00561	PTHR11614	KOG1455			lipase, putative, expressed
MDC020127.174:13627-13974	AT2G18280.2	PF01167	PTHR16517	KOG2502			OsFBT4 - F-box and tubby domain containing protein, expressed
MDC020196.147:693-1117	AT4G29380.1	PF00069,PF02985,PF00400	PTHR22971	KOG1240	2.7.11.1	K08333	WD domain and HEAT domain containing protein, putative, expressed
MDC020226.287:8976-9718	AT5G46770.1						
MDC020272.72:5-623	AT3G25600.1	PF00036	PTHR10891	KOG0027		K13448	OsCML14 - Calmodulin-related calcium sensor protein, expressed
MDC000218.595:8811-8927	AT2G18600.1	PF00179	PTHR11621	KOG0420	6.3.2.19	K10579	ubiquitin-conjugating enzyme, putative, expressed
MDC020310.146:2259-2549	AT3G57770.1		PTHR23258				OsWAK53b - OsWAK receptor-like protein kinase, expressed
MDC020310.146:5216-5468	AT3G57770.1		PTHR23258				OsWAK53b - OsWAK receptor-like protein kinase, expressed
MDC020353.88:17968-18166	AT5G66450.2	PF01569	PTHR11247	KOG3146			phosphatase, putative, expressed
MDC020364.514:4946-5132	AT5G15790.2	PF00097	PTHR22766				zinc finger, C3HC4 type domain containing protein, expressed
MDC020450.123:5627-6146	AT4G03030.1	PF00646,PF01344,PF07646	PTHR23230:SF146				OsFBK6 - F-box domain and kelch repeat containing protein, expressed
MDC020479.248:5861-6227	AT1G43640.1	PF00646,PF01167	PTHR16517	KOG2502			OsFBT6 - F-box and tubby domain containing protein, expressed
MDC020690.260:22415-22574	AT5G64200.2	PF00076	PTHR23147	KOG4207		K12891	RNA recognition motif containing protein, expressed
MDC020733.167:1678-2210	AT1G55160.3						expressed protein
MDC020827.218:21752-22150	AT2G24940.1	PF00173	PTHR10281				cytochrome b5-like Heme/Steroid binding domain containing protein, expressed
MDC020867.67:244-615	AT5G62890.3	PF00860	PTHR11119	KOG1292			nucleobase-ascorbate transporter, putative, expressed
MDC021014.157:18162-18516	AT4G31720.1	PF03540	PTHR21242			K03134	transcription initiation factor TFIID subunit 10, putative, expressed
MDC021147.99:1202-1451	AT2G03500.1	PF00249					MYB family transcription factor, putative, expressed
MDC021331.203:2656-3088	AT5G11650.1	PF12146,PF00561	PTHR11614	KOG1455			hydrolase, alpha/beta fold family domain containing protein, expressed
MDC021393.363:4685-5100	AT4G39730.1	PF01477					wound/stress protein, putative, expressed
MDC021461.112:3144-3560	AT1G79510.2	PF10184					expressed protein
MDC021463.473:17752-18244	AT4G10840.1	PF07719,PF00515,PF07721	PTHR19959	KOG1840			tetratricopeptide repeat domain containing protein, expressed
MDC001963.417:4488-4646	AT4G27250.2	PF01370	PTHR10366	KOG1502			dihydroflavonol-4-reductase, putative, expressed
MDC021607.243:3134-3692	AT5G10520.1	PF00069,PF07714	PTHR23258	KOG1187			protein kinase domain containing protein, expressed
MDC021609.524:3718-3898	AT5G34850.1	PF00149	PTHR22953	KOG1378			Ser/Thr protein phosphatase family protein, putative, expressed
MDC021614.36:14793-15075	AT1G34760.2	PF00244	PTHR18860	KOG0841			14-3-3 protein, putative, expressed
MDC001963.417:5141-5310	AT4G27250.2	PF01370	PTHR10366	KOG1502			dihydroflavonol-4-reductase, putative, expressed
MDC021658.157:7798-8265	AT1G10950.1	PF02990,PF09680	PTHR10766	KOG1277			transmembrane 9 superfamily member, putative, expressed
MDC021663.272:7322-7560	AT5G59250.1	PF00083,PF07690	PTHR11600	KOG0254			transporter family protein, putative, expressed
MDC021673.67:2187-2416	AT5G15780.1	PF01190					POE117 - Pollen Ole e 1 allergen and extensin family protein precursor, expressed
MDC021679.163:8234-8578	AT2G46020.1	PF08880,PF00176,PF00271,PF00439	PTHR10799	KOG0386			SNF2 family N-terminal domain containing protein, expressed
MDC021726.381:2654-2885	AT1G33810.1						expressed protein
MDC021888.183:8090-8386	AT5G60660.1	PF00230	PTHR19139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC021946.181:5025-5983	AT3G44260.1	PF04857	PTHR10797	KOG0304			CAF1 family ribonuclease containing protein, putative, expressed
MDC021991.115:13313-13634	AT4G34262.2						
MDC022012.425:3903-4199	AT3G03080.1	PF00107	PTHR11695	KOG1196	1.3.1.74	K08070	NADP-dependent oxidoreductase, putative, expressed
MDC002052.246:116-455	AT3G55360.1	PF02544	PTHR10556	KOG1639	1.3.1.-	K10258	3-oxo-5-alpha-steroid 4-dehydrogenase, putative, expressed
MDC022074.29:9529-10735	AT2G37220.1	PF00076	PTHR10432	KOG0131			RNA recognition motif containing protein, putative, expressed
MDC022074.29:11143-11246	AT2G37220.1	PF00076	PTHR10432	KOG0131			RNA recognition motif containing protein, putative, expressed
MDC022078.140:14217-14720	AT5G64816.2						THION26 - Plant thionin family protein precursor, expressed
MDC022085.43:356-778	AT4G31300.3	PF00227	PTHR11599	KOG0174	3.4.25.1	K02738	peptidase, T1 family, putative, expressed
MDC022085.65:6537-7053	AT4G31300.3	PF00227	PTHR11599	KOG0174	3.4.25.1	K02738	peptidase, T1 family, putative, expressed
MDC022086.272:6317-6499	AT1G07440.2	PF00106	PTHR19410	KOG0725			oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC022086.272:6776-7049	AT1G07440.2	PF00106	PTHR19410	KOG0725			oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC022086.272:7788-8194	AT2G29330.1	PF00106	PTHR19410	KOG0725	1.1.1.206	K08081	oxidoreductase, short chain dehydrogenase/reductase family domain containing protein, expressed
MDC022119.74:4893-5155	AT1G65270.1			KOG4827			expressed protein
MDC022251.179:6243-7113	AT3G14310.1	PF04043,PF01095					pectinesterase, putative, expressed
MDC022362.462:10497-10811	AT1G03210.1	PF02567	PTHR13774	KOG3033		K06998	phenazine biosynthesis protein, putative, expressed

MDC022362.462:11464-11752	AT4G02860.1	PF02567	PTHR13774	KOG3033		phenazine biosynthesis protein, putative, expressed
MDC022376.75:3053-3379	AT3G03940.1	PF00069	PTHR11909	KOG1164		CK1_CaseinKinase_1a.3 - CK1 includes the casein kinase 1 kinases, expressed
MDC022484.73:18974-19931	AT3G13920.4	PF00270,PF00271	PTHR10967	KOG0328		DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC022484.73:20443-20879	AT1G54270.2	PF00270,PF00271	PTHR10967	KOG0327	K03257	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC002113.246:13095-13300	AT2G25910.2	PF01612,PF00013	PTHR12124			3-5 exonuclease/ nucleic acid binding protein, putative, expressed
MDC022597.70:2400-2698	AT1G08410.1	PF01926	PTHR11089	KOG1424	3.6.1.-	GTPase of unknown function domain containing protein, putative, expressed
MDC022628.340:10959-11393	AT2G30950.1	PF06480,PF07728,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	OsFtsH2 FtsH protease, homologue of AtFtsH2/8, expressed
MDC022628.340:12342-12976	AT2G30950.1	PF06480,PF07728,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	OsFtsH2 FtsH protease, homologue of AtFtsH2/8, expressed
MDC022628.341:355-501	AT1G06430.1	PF06480,PF07728,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	OsFtsH2 FtsH protease, homologue of AtFtsH2/8, expressed
MDC022637.126:5119-5368	AT1G19640.1	PF03492			2.1.1.141	SAM dependent carboxyl methyltransferase, putative, expressed
MDC022637.126:5454-5802	AT1G19640.1	PF03492			2.1.1.141	SAM dependent carboxyl methyltransferase, putative, expressed
MDC022637.126:6384-6996	AT1G19640.1	PF03492			2.1.1.141	SAM dependent carboxyl methyltransferase, putative, expressed
MDC022638.160:2961-3442	AT1G13245.1	PF08137				expressed protein
MDC022642.185:459-976	AT1G45180.1	PF00097	PTHR14155			zinc finger, C3HC4 type domain containing protein, expressed
MDC022756.223:2387-2824	AT2G40935.1	PF04749				uncharacterized Cys-rich domain containing protein, putative, expressed
MDC022778.400:862-1178	AT1G22510.2	PF06803	PTHR22894	KOG4604		zinc finger, C3HC4 type domain containing protein, expressed
MDC022787.507:14430-14765	AT4G23160.1	PF07727,PF01657,PF00069,PF07714,PF11883	PTHR11439	KOG1187		TKL_IRAK_DUF26-lc.20 - DUF26 kinases have homology to DUF26 containing loci, expressed
MDC022791.14:17058-17637	AT5G16970.1	PF00107	PTHR11695	KOG1196	1.3.1.74	NADP-dependent oxidoreductase, putative, expressed
MDC022803.125:8318-8996	AT5G28540.1	PF00012	PTHR19375	KOG0100		DnaK family protein, putative, expressed
MDC022824.308:8367-8863	AT4G32551.2	PF08513,PF00400	PTHR22847	KOG0266		transcriptional corepressor LEUNIG, putative, expressed
MDC022831.234:2-828	AT4G17690.1	PF00141			1.1.1.7	peroxidase family protein, expressed
MDC022831.238:287-403	AT4G27960.2	PF00179	PTHR11621	KOG0417		ubiquitin-conjugating enzyme, putative, expressed
MDC022880.59:13085-13467	AT4G30900.2					endonuclease/exonuclease/phosphatase family protein, putative, expressed
MDC022888.364:12533-12667	AT3G51730.1	PF05184,PF03489	PTHR11480	KOG1340		saposin-like type B, region 1 family protein, putative, expressed
MDC022888.364:12994-13189	AT3G51730.1	PF05184,PF03489	PTHR11480	KOG1340		saposin-like type B, region 1 family protein, putative, expressed
MDC022888.364:14577-14856	AT3G51730.1	PF05184,PF03489	PTHR11480	KOG1340		saposin-like type B, region 1 family protein, putative, expressed
MDC023032.62:43936-44459	AT5G53220.3					expressed protein
MDC023531.44:2818-2958	AT3G59540.1	PF01781	PTHR10965	KOG3499	2.4.1.241	60S ribosomal protein L38, putative, expressed
MDC023633.27:5099-5516	AT3G11670.2					digalactosylglycerol synthase, chloroplast precursor, putative, expressed
MDC023670.41:2268-2781	AT2G33590.1	PF01370	PTHR10366	KOG1502		reductase, putative, expressed
MDC026269.25:2726-2851	AT5G64730.1	PF00400	PTHR22842	KOG0316		WD domain, G-beta repeat domain containing protein, expressed
MDC026617.62:10076-10400	AT5G56190.2	PF00400	PTHR22847			WD-40 repeat family protein, putative, expressed
MDC002159.340:12619-13184	AT1G78290.3	PF00069	PTHR22982	KOG0583	2.7.11.1	CAMK_CAMK_like.7 - CAMK includes calcium/calmodulin dependent protein kinases, expressed
MDC027871.11:6913-8058	AT2G45260.1	PF04859				GL1, putative, expressed
MDC032130.10:2771-3287	AT1G08180.1					
MDC036854.6:543-1070	AT2G46495.1	PF00097	PTHR22764			zinc finger, C3HC4 type domain containing protein, expressed
MDC002191.244:5992-6164	AT5G47030.1	PF02823	PTHR13822	KOG1758	3.6.3.14	ATP synthase delta chain, mitochondrial precursor, putative, expressed
MDC036969.18:8353-8496	AT1G15270.1	PF09072				coiled-coil domain-containing protein 72, putative, expressed
MDC040767.9:10828-11034	AT3G02250.1	PF10250				auxin-independent growth promoter protein, putative, expressed
MDC002203.349:4228-4862	AT1G62290.2	PF00026,PF03489,PF05184	PTHR13683	KOG1339	3.4.23.40	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC002205.555:7793-8082	AT1G11910.1	PF00026,PF03489,PF05184	PTHR13683	KOG1339	3.4.23.40	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC002205.555:8858-9031	AT1G62290.2	PF00026,PF03489,PF05184	PTHR13683	KOG1339	3.4.23.40	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC002205.604:5796-6019	AT3G15351.2					expressed protein
MDC002252.327:4583-5069	AT1G07520.1	PF03514				SCARECROW, putative, expressed
MDC002319.140:10705-11101	AT2G38905.1	PF01679	PTHR21659	KOG1773		OsRCI2-7 - Putative low temperature and salt responsive protein, expressed
MDC000071.210:1438-1573	AT4G16695.3					
MDC002360.331:36076-36218	AT3G17760.2	PF00282	PTHR11999	KOG1383	4.1.1.15	decarboxylase, putative, expressed
MDC002367.269:48264-48619	AT5G17330.1	PF00282	PTHR11999	KOG1383	4.1.1.15	glutamate decarboxylase, putative, expressed
MDC002367.269:48993-49472	AT1G65960.2	PF00282	PTHR11999	KOG1383	4.1.1.15	glutamate decarboxylase, putative, expressed
MDC002367.269:49581-49783	AT4G13195.1					
MDC002385.290:19935-20648	AT4G13230.1					
MDC002412.304:11037-11650	AT5G19130.2	PF04114	PTHR13304	KOG3566		GPI transamidase component family protein, putative, expressed
MDC002431.300:12026-12395	AT3G26510.5	PF00564				PB1 domain containing protein, expressed
MDC002441.272:2839-3539	ATCG01250.1	PF00361	PTHR22773	KOG4668		NADPH-dependent oxidoreductase, putative expressed protein
MDC002450.221:3501-4098	AT3G17668.1					oleosin, putative, expressed
MDC002453.447:10532-10849	AT3G18570.1	PF01277				6-phosphofructokinase, putative, expressed
MDC00298.380:1328-1593	AT5G56630.1	PF00365	PTHR13697	KOG2440	2.7.1.11	expressed protein
MDC002536.231:28261-28837	AT5G02520.1	PF09133				expressed protein
MDC002555.573:6522-6894	AT2G38740.1	PF00702	PTHR18901	KOG2914		haloacid dehalogenase-like hydrolase family protein, putative, expressed
MDC002562.442:3585-4052	AT2G38740.1	PF00702	PTHR18901	KOG2914		haloacid dehalogenase-like hydrolase family protein, putative, expressed
MDC002562.442:4163-4526	AT2G38740.1	PF00702	PTHR18901	KOG2914		haloacid dehalogenase-like hydrolase family protein, putative, expressed
MDC002562.442:4820-4968	AT2G38740.1	PF00702	PTHR18901	KOG2914		haloacid dehalogenase-like hydrolase family protein, putative, expressed
MDC002562.442:5044-5170	AT3G12587.1	PF10215				expressed protein
MDC002563.449:3601-3812	AT4G02290.1	PF00759	PTHR22298			endoglucanase, putative, expressed
MDC002579.350:565-1558	AT1G07440.2	PF00106	PTHR19410	KOG0725		oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC002584.153:3776-3993	AT4G10840.1	PF07719,PF00515,PF07721	PTHR19959	KOG1840		tetratricopeptide repeat domain containing protein, expressed
MDC002655.565:10635-11102	AT4G10840.1	PF07719,PF00515,PF07721	PTHR19959	KOG1840		tetratricopeptide repeat domain containing protein, expressed
MDC002655.586:7567-8051	AT5G51700.1	PF04968	PTHR12621		K13458	rar1, putative, expressed
MDC002662.815:1633-1925	AT4G19003.1	PF05871	PTHR13149	KOG4068	K12189	vacuolar protein-sorting-associated protein 25, putative, expressed
MDC002663.516:8880-9798	AT3G12030.1	PF01956	PTHR20917	KOG3312		fb27, putative, expressed
MDC002683.322:3279-3696	AT1G23440.1		PTHR23402	KOG4755		pyrrolidone-carboxylate peptidase, putative, expressed
MDC002758.275:5034-5548	AT1G23440.1		PTHR23402	KOG4755		pyrrolidone-carboxylate peptidase, putative, expressed
MDC002758.275:7054-7287	AT1G52570.1	PF00168,PF00614,PF12357	PTHR18896	KOG1329		phospholipase D, putative, expressed
MDC002787.258:19523-20073	AT4G17690.1	PF00141			1.1.1.7	peroxidase family protein, expressed
MDC002848.461:9691-10126	AT1G66950.1	PF00005,PF01061,PF08370	PTHR19241	KOG0065		pleiotropic drug resistance protein, putative, expressed
MDC00368.236:1585-1999	AT2G01410.1					expressed protein
MDC002955.279:38802-39101	AT1G19240.1					expressed protein
MDC002986.271:21-529	AT1G02790.1	PF00295			3.2.1.67	polygalacturonase, putative, expressed
MDC003026.402:4690-4972	AT2G15450.1	PF00295				polygalacturonase, putative, expressed
MDC003026.402:5565-6093	AT5G65550.1		PTHR11926	KOG1192		glucosyltransferase, putative, expressed

MDC003081.405:1372-1864	AT5G65550.1		PTHRR11926	KOG1192			glucosyltransferase, putative, expressed
MDC003081.405:1945-2200	AT4G21120.1	PF00324	PTHRR11785	KOG1286			amino acid permease family protein, putative
MDC000368.238:33490-34602	AT3G07760.2	PF00536					expressed protein
MDC003198.202:2865-3190	AT5G53490.3	PF00805					thylakoid luminal protein, putative, expressed
MDC003205.158:29546-29798	AT5G53490.3	PF00805					thylakoid luminal protein, putative, expressed
MDC003205.158:29880-30320	AT2G46550.2						expressed protein
MDC003205.158:76934-77309	AT1G30450.2	PF00324	PTHRR11827	KOG2082			amino acid permease family protein, putative, expressed
MDC000368.238:51135-51386	AT4G35100.2	PF00230	PTHRR19139	KOG0223	K09872		aquaporin protein, putative, expressed
MDC003306.225:3479-3782	AT2G16850.1	PF00230	PTHRR19139	KOG0223	K09872		aquaporin protein, putative, expressed
MDC003306.225:3868-4016	AT2G16850.1	PF00230	PTHRR19139	KOG0223	K09872		aquaporin protein, putative, expressed
MDC003306.225:4116-4489	AT3G02720.1	PF01965	PTHRR11019	KOG2764			DJ-1 family protein, putative, expressed
MDC003313.350:8410-8848	AT1G31817.1	PF00411	PTHRR11759	KOG0408			ribosomal protein, putative, expressed
MDC003322.305:8692-9506	AT4G21440.1	PF00249	PTHRR10641	KOG0048	K09422		MYB family transcription factor, putative, expressed
MDC003396.159:7266-7693	AT3G16340.2	PF10161,PF08370,PF00005	PTHRR19241	KOG0065			pleiotropic drug resistance protein, putative, expressed
MDC003415.452:48231-48632	AT5G18790.1	PF00471					50S ribosomal protein L33, putative, expressed
MDC003417.148:4832-5225	AT2G02990.1	PF00445	PTHRR11240	KOG1642			ribonuclease T2 family domain containing protein, expressed
MDC003465.666:11182-11467	AT2G47680.1	PF00271,PF00642	PTHRR18934	KOG0920			zinc finger helicase family protein, putative, expressed
MDC003476.424:4739-5090	AT2G40370.1	PF07732,PF00394,PF07731	PTHRR11709	KOG1263			laccase precursor protein, putative, expressed
MDC003534.362:4332-4810	AT5G48640.1	PF00134	PTHRR10026	KOG0794			cyclin, putative, expressed
MDC003623.656:7835-8044	AT4G00585.1						expressed protein
MDC003652.401:5479-5810	AT3G58560.1	PF03372	PTHRR12121	KOG0620	3.1.-.-	K12603	endonuclease/exonuclease/phosphatase family domain containing protein, expressed
MDC003661.185:20810-21803	AT5G08100.1	PF01112	PTHRR10188	KOG1592	3.4.19.5	K13051	L-asparaginase precursor protein, putative, expressed
MDC003664.475:11513-12117	AT5G08120.1						microtubule-associated protein, putative, expressed
MDC003664.475:17093-17401	AT5G36110.1	PF00067	PTHRR19383	KOG0157			cytochrome P450, putative, expressed
MDC003668.599:3948-4504	AT5G36110.1	PF00067	PTHRR19383	KOG0157			cytochrome P450, putative, expressed
MDC003668.599:4608-4827	AT4G23420.3	PF00106	PTHRR19410	KOG1208			oxidoreductase, short chain dehydrogenase/reductase family domain containing family, expressed
MDC003691.613:12408-12611	AT4G23420.3	PF00106	PTHRR19410	KOG1208			oxidoreductase, short chain dehydrogenase/reductase family domain containing family, expressed
MDC003691.613:13105-13267	AT4G23420.3	PF00106	PTHRR19410	KOG1208			oxidoreductase, short chain dehydrogenase/reductase family domain containing family, expressed
MDC003691.613:14240-14582	AT2G18110.1	PF00736	PTHRR11595	KOG1668		K03232	elongation factor protein, putative, expressed
MDC003707.256:151-617	AT2G02720.1	PF04431,PF00544			4.2.2.2	K01728	pectate lyase precursor, putative, expressed
MDC000416.247:35408-35747	AT1G11910.1	PF00026,PF03489,PF05184	PTHRR13683	KOG1339	3.4.23.40	K08245	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC003743.404:7074-7268	AT1G08230.2	PF01490	PTHRR22950	KOG1303			transmembrane amino acid transporter protein, putative, expressed
MDC003758.352:13113-13479	AT3G20600.1						harpin-induced protein 1 domain containing protein, expressed
MDC003785.419:14126-14836	AT2G43780.2						conserved hypothetical protein
MDC003785.419:15852-16189	AT3G20800.1	PF04078	PTHRR12262	KOG3036		K12606	expressed protein
MDC003833.254:923-1391	AT1G14420.1	PF04431,PF00544			4.2.2.2	K01728	pectate lyase precursor, putative, expressed
MDC000416.247:35907-36548	AT5G66740.1	PF04788					expressed protein
MDC003876.694:2083-2790	AT5G66740.1	PF04788					expressed protein
MDC003876.694:3305-3512	AT1G13360.1						expressed protein
MDC003878.401:325-1733	AT2G40470.1	PF03195					DUF260 domain containing protein, putative, expressed
MDC003882.313:12016-12674	AT2G42760.1						expressed protein
MDC003889.426:7020-7694	AT1G71010.1	PF01504	PTHRR23086	KOG0230			1-phosphatidylinositol-4-phosphate 5-kinase/ zinc ion binding protein, putative, expressed
MDC000421.511:6588-6935	AT2G01940.3	PF12171,PF00096	PTHRR11389				ZOS08-7 - C2H2 zinc finger protein, expressed
MDC003936.406:51932-52906	AT1G27530.1	PF08694	PTHRR12921	KOG3357		K12165	ufm1-conjugating enzyme 1, putative, expressed
MDC003963.399:2459-2839	AT1G48830.2	PF01251	PTHRR11278	KOG3320			40S ribosomal protein S7, putative
MDC004009.559:39608-40030	AT1G48830.2	PF01251	PTHRR11278	KOG3320			40S ribosomal protein S7, putative
MDC004009.559:40130-40478	AT1G48830.2	PF01251	PTHRR11278	KOG3320			40S ribosomal protein S7, putative
MDC004009.559:40660-40931	AT3G19760.1	PF00270,PF00271	PTHRR10967	KOG0328	3.6.4.13	K13025	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC004010.194:30326-30466	AT2G01970.1	PF02990	PTHRR10766	KOG1277			transmembrane 9 superfamily member, putative, expressed
MDC004088.250:961-1337	AT1G07830.1	PF06984,PF00831	PTHRR21183	KOG3331			39S ribosomal protein L47, mitochondrial precursor, putative, expressed
MDC004095.243:345-694	AT2G46150.1	PF03168					harpin-induced protein 1 domain containing protein, expressed
MDC004097.230:13303-14099	AT3G54200.1	PF03168					harpin-induced protein 1 domain containing protein, expressed
MDC004097.230:10956-11698	AT2G44360.1						
MDC004168.448:5563-5714	AT2G17990.1						
MDC004176.297:3407-3797	AT1G07440.2	PF00106	PTHRR19410	KOG0725			calcium-dependent protein kinase CPK1 adapter protein 2, putative, expressed
MDC004279.272:6053-6248	AT1G07440.2	PF00106	PTHRR19410	KOG0725			oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC004279.407:7341-7593	AT2G29320.1	PF00106	PTHRR19410	KOG0725	1.1.1.206	K08081	oxidoreductase, short chain dehydrogenase/reductase family protein, putative, expressed
MDC004279.407:8692-9013	AT5G48960.1	PF05761	PTHRR12103	KOG2469			5-nucleotidase domain-containing protein, putative, expressed
MDC004302.250:3053-3502	AT3G48140.1	PF06522					B12D protein, putative, expressed
MDC000479.396:652-1113	AT5G18150.1		PTHRR12133				expressed protein
MDC004356.237:6421-6708	AT5G18150.1		PTHRR12133				expressed protein
MDC004356.237:6808-6910	AT5G59970.1	PF00125	PTHRR10484	KOG3467		K11254	Core histone H2A/H2B/H3/H4 domain containing protein, putative, expressed
MDC004389.393:4277-4752	AT5G04500.1	PF09258	PTHRR11062	KOG1022			exostosin, putative, expressed
MDC004425.303:2507-3293	AT2G46150.1	PF03168					harpin-induced protein 1 domain containing protein, expressed
MDC004475.200:4627-5729	AT3G12870.1						expressed protein
MDC004559.262:978-1347	AT3G25940.1	PF01096	PTHRR11239	KOG2907	2.7.7.6	K03000	DNA-directed RNA polymerase I subunit RPA12, putative, expressed
MDC004588.262:3095-3346	AT5G53070.1	PF01281	PTHRR21368	KOG4607			ribosomal L9, putative, expressed
MDC004652.210:27146-27473	AT1G11910.1	PF00026,PF03489,PF05184	PTHRR13683	KOG1339	3.4.23.40	K08245	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC004719.334:33353-33870	AT1G11910.1	PF00026,PF03489,PF05184	PTHRR13683	KOG1339	3.4.23.40	K08245	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC004719.334:35584-35741	AT1G02070.1						zinc finger protein, putative, expressed
MDC004742.548:8028-8154	AT3G18215.1	PF04654					expressed protein
MDC004763.566:3821-4013	AT5G18790.1	PF00471					50S ribosomal protein L33, putative, expressed
MDC004790.466:18774-19119	AT1G05960.2		PTHRR12444	KOG3505			cyclin-related protein, putative, expressed
MDC004812.214:10140-10649	AT2G46590.2	PF02701					doz zinc finger domain containing protein, putative, expressed
MDC004894.273:6281-6551	AT4G30380.1	PF03330					beta-expansin precursor, putative, expressed
MDC004903.290:28-253	AT4G35783.1	PF08137					conserved hypothetical protein
MDC005044.363:2733-3247	AT4G25260.1	PF04043					invertase/pectin methylesterase inhibitor family protein, putative, expressed
MDC005053.110:4914-5359	AT5G62360.1	PF04043					invertase/pectin methylesterase inhibitor family protein, putative, expressed
MDC005053.110:5464-5590	AT4G23100.3	PF04107			6.3.2.2	K01919	glutamate--cysteine ligase, chloroplast precursor, putative, expressed
MDC005075.307:3581-3994	AT2G29590.1	PF03061	PTHRR21660	KOG3328			thioesterase family protein, putative, expressed

MDC005094.389:2512-3049	AT2G06990.1	PF00270,PF00271,PF08148	PTH11752	KOG0948			DSHCT domain containing protein, expressed
MDC005141.258:7613-7859	AT5G49810.1		PTH11751	KOG0257	2.1.1.12	K08247	methionine S-methyltransferase, putative, expressed
MDC005190.583:11765-12203	AT5G20170.1						expressed protein
MDC005190.586:28693-29117	AT3G06170.1	PF03348	PTH110383	KOG2592			TMS membrane protein/tumour differentially expressed protein, putative, expressed
MDC005242.172:12540-13598	AT5G66930.3	PF07855	PTH113292	KOG4493			expressed protein
MDC005257.231:6275-6378	AT5G53370.1	PF04043,PF01095	PTH122931.SF5				pectinesterase, putative, expressed
MDC005334.309:40809-41221	AT1G17020.1	PF03171	PTH110209	KOG0143			naringenin, 2-oxoglutarate 3-dioxygenase, putative, expressed
MDC000612.338:24965-25404	AT4G17190.1	PF00348	PTH11525	KOG0711	2.5.1.1,2.5.1.1	K00787	polyprenyl synthetase, putative, expressed
MDC005353.186:3030-3296	AT1G34750.1	PF00481	PTH113832	KOG0698			protein phosphatase 2C, putative, expressed
MDC005367.75:16852-17121	AT1G22280.3	PF00481	PTH113832	KOG0698			protein phosphatase 2C, putative, expressed
MDC005367.75:17253-17433	AT1G61070.1	PF07333,PF00304					DEF8 - Defensin and Defensin-like DEFL family, expressed
MDC005456.101:32525-33076	AT3G14630.1	PF00067	PTH119383	KOG0157			cytochrome P450 72A1, putative, expressed
MDC005483.475:1862-2359	AT3G14630.1	PF00067	PTH119383	KOG0157			cytochrome P450 72A1, putative, expressed
MDC005483.475:2519-2878	AT5G56170.1						GPI-anchored protein, putative, expressed
MDC005607.185:3202-3687	AT4G30790.1	PF10377	PTH113222				expressed protein
MDC000651.338:6690-7035	AT3G03520.1	PF04185			3.1.4.3	K01114	phosphoesterase family protein, putative, expressed
MDC005623.471:5146-5546	AT1G13440.2	PF00044,PF02800	PTH110836	KOG0657	1.2.1.12	K00134	glyceraldehyde-3-phosphate dehydrogenase, putative, expressed
MDC005648.396:4843-5646	AT5G64610.1	PF11717,PF00385,PF01853	PTH110615	KOG2747	2.3.1.48	K11308	MYST-like histone acetyltransferase 1, putative, expressed
MDC005683.152:7464-7625	AT1G21630.1	PF00036	PTH111216	KOG0998			EF hand family protein, putative, expressed
MDC005717.683:79-577	AT1G05170.2	PF01762	PTH111214	KOG2288			galactosyltransferase, putative, expressed
MDC005782.166:27529-28337	AT5G15790.2	PF00097	PTH122766				zinc finger, C3HC4 type domain containing protein, expressed
MDC005795.287:6123-6431	AT2G39500.1						
MDC005856.445:7345-7621	AT5G51190.1	PF00847					AP2 domain containing protein, expressed
MDC005866.401:35521-36684	AT3G12360.1	PF00023	PTH118958	KOG4412			ankyrin repeat-containing protein, putative, expressed
MDC005950.209:1841-2991	AT3G12360.1	PF00023	PTH118958	KOG4412			ankyrin repeat-containing protein, putative, expressed
MDC005950.237:13639-14704	AT1G22070.1	PF00170,PF07716				K14431	transcription factor, putative, expressed
MDC006667.347:25394-25851	AT3G49590.3	PF10033		KOG4573			expressed protein
MDC006166.69:22399-22979	AT1G71865.1						expressed protein
MDC006167.203:6785-7413	AT5G51280.1	PF00270,PF00271,PF00098	PTH110967	KOG0341	3.6.4.13	K13116	DEAD-box ATP-dependent RNA helicase 35A, putative, expressed
MDC006191.181:59671-60011	AT1G19130.1	PF06172				K09705	cupin superfamily protein, putative, expressed
MDC006200.189:255-378	AT1G19130.1	PF06172				K09705	cupin superfamily protein, putative, expressed
MDC006200.189:719-977	AT3G61770.1	PF02681					Divergent PAP2 family domain containing protein, expressed
MDC006204.278:5342-5722	AT1G33055.1						expressed protein
MDC006212.350:19119-19764	AT1G05810.1	PF00071,PF08477	PTH11708	KOG0087		K07976	ras-related protein, putative, expressed
MDC006231.909:29746-30018	AT3G28050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC006246.466:8563-8734	AT1G23440.1		PTH123402	KOG4755			pyrrolidone-carboxylate peptidase, putative, expressed
MDC006260.462:6583-6877	AT2G45960.3	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006289.408:8288-8577	AT4G00430.1	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006289.408:9216-9268	AT4G27750.1						impaired sucrose induction 1, putative, expressed
MDC006289.410:4115-4432	AT2G37750.1						
MDC006340.216:19210-20061	AT1G26670.1	PF05008,PF12352	PTH121230	KOG1666		K08493	vesicle transport v-SNARE protein, putative, expressed
MDC006363.247:28792-29092	AT5G49525.1						expressed protein
MDC006424.194:9322-9729	AT1G67620.1	PF02410	PTH121043	KOG3212			expressed protein
MDC006471.130:167-359	AT4G14103.2	PF00646,PF07723					OsFBL3 - F-box domain and LRR containing protein, expressed
MDC006517.413:12768-13371	AT1G65000.1						expressed protein
MDC006520.239:5991-6735	AT2G31085.1						
MDC006520.258:40616-41227	AT2G26740.1	PF12146,PF00561	PTH110992	KOG4178			hydrolase, alpha/beta fold family domain containing protein, expressed
MDC006603.356:888-1307	AT3G04180.1	PF00190,PF07883					Cupin domain containing protein, expressed
MDC006603.734:7137-7471	AT1G67830.1	PF00657					GDSL-like lipase/acylhydrolase, putative, expressed
MDC006603.753:648-986	AT5G59960.1						expressed protein
MDC006624.226:615-886	AT5G59970.1	PF00125	PTH110484	KOG3467		K11254	Core histone H2A/H2B/H3/H4 domain containing protein, putative, expressed
MDC006624.226:6675-7194	AT3G19760.1	PF00270,PF00271	PTH110967	KOG0328	3.6.4.13	K13025	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC006639.149:9374-9510	AT3G19760.1	PF00270,PF00271	PTH110967	KOG0328	3.6.4.13	K13025	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC006639.149:10169-10560	AT3G13530.1	PF00069,PF07714,PF00514,PF02985	PTH122986	KOG0198			STE_MEKK_ste11_MAP3K.1 - STE kinases include homologs to sterile 7, sterile 11 and sterile 20 from yeast, expressed
MDC006639.149:10658-11039	AT4G17560.1	PF01245	PTH115680	KOG1698			50S ribosomal protein L19, chloroplast precursor, putative, expressed
MDC006675.305:292-384	AT5G47190.1	PF01245	PTH115680	KOG1698			50S ribosomal protein L19, chloroplast precursor, putative, expressed
MDC006675.305:1240-1535	AT3G54820.1	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006710.363:6328-6707	AT3G54820.1	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006710.363:6868-6988	AT2G37170.1	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006710.363:8904-9171	AT3G54820.1	PF00230	PTH119139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC006710.363:9415-9810	AT5G09960.1	PF05627					expressed protein
MDC006772.187:518-757	AT5G51190.1	PF00847					AP2 domain containing protein, expressed
MDC00706.497:11725-12685	AT2G28840.2	PF00023	PTH118958	KOG4214			ankyrin repeat domain-containing protein 28, putative, expressed
MDC006804.119:728-1335	AT1G08230.2	PF01490	PTH122950	KOG1303			transmembrane amino acid transporter protein, putative, expressed
MDC006834.195:5931-6204	AT1G09900.1	PF01535	PTH110483				pentatricopeptide repeat domain containing protein, putative, expressed
MDC007047.426:19297-19639	AT5G47820.2	PF00225	PTH116012	KOG0244		K10395	kinesin motor domain containing protein, putative, expressed
MDC007057.148:1220-1518	AT4G22570.1	PF00156		KOG1712	2.4.2.7	K00759	phosphoribosyl transferase, putative, expressed
MDC007058.290:9956-10075	AT5G16380.1	PF04398					expressed protein
MDC007066.597:3722-4200	AT2G39970.1	PF00153					mitochondrial carrier protein, putative, expressed
MDC007117.619:30844-31444	AT5G23070.1	PF00265	PTH111441	KOG3125	2.7.1.21	K00857	thymidine kinase, putative, expressed
MDC007192.252:1298-1688	AT3G06980.1	PF00270,PF00271	PTH110967	KOG0331			DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC007239.507:18593-18889	AT1G74340.1	PF07297		KOG3488		K09658	dolichol phosphate-mannose biosynthesis regulatory protein, putative, expressed
MDC00741.237:17856-18144	AT5G19140.2	PF12481,PF12504	PTH11772				stem-specific protein TSJ11, putative, expressed
MDC007283.1041:967-1726	AT3G57080.1	PF03871,PF01191	PTH110535	KOG3218			DNA-directed RNA polymerases I, II, and III subunit RPABC1, putative, expressed
MDC007283.917:10694-10994	AT1G56070.1	PF00009,PF01926,PF03144,PF03764,PF00679	PTH123115	KOG0469	3.6.5.3	K03234	elongation factor, putative, expressed
MDC007289.107:9052-9887	AT5G02490.1	PF00012	PTH119375	KOG0109		K03283	DnaK family protein, putative, expressed
MDC007308.338:25153-25355	AT5G35910.1	PF01612,PF00570	PTH112124	KOG2206	3.1.13.-	K12591	3-5 exonuclease family protein, putative, expressed
MDC007315.261:46384-46703	AT5G61670.2						OR, putative, expressed
MDC007344.1025:7310-7666	AT4G25620.1						expressed protein
MDC00796.524:10939-12475	AT4G09550.1	PF12554					expressed protein

MDC007350.839:8348-8675	AT2G28680.1	PF00190					cupin domain containing protein, expressed
MDC007376.494:17698-18125	AT2G28680.1	PF00190					cupin domain containing protein, expressed
MDC007376.494:18463-18905	AT1G07750.1	PF00190					cupin domain containing protein, expressed
MDC007376.494:18965-19412	AT3G12700.1		PTHR13683	KOG1339			aspartyl protease family protein, putative, expressed
MDC007422.177:2747-3819	AT3G12700.2		PTHR13683				aspartyl protease family protein, putative, expressed
MDC007422.177:4802-5629	AT5G11760.1	PF08576					expressed protein
MDC007454.249:3101-3502	AT1G75620.1	PF07250,PF09118					glyoxal oxidase-related, putative, expressed
MDC007469.326:38450-38743	AT5G62000.4	PF02362,PF06507,PF02309					auxin response factor, putative, expressed
MDC007485.683:834-1172	AT2G43370.1	PF00076	PTHR13952	KOG0113		K13155	RNA recognition motif containing protein, putative, expressed
MDC007509.254:671-866	AT5G41800.1	PF01490	PTHR22950	KOG1303			transmembrane amino acid transporter protein, putative, expressed
MDC00812.292:23436-23602	AT4G22720.2	PF00814	PTHR11735	KOG2708	3.4.24.57	K01409	O-sialoglycoprotein endopeptidase, putative, expressed
MDC007568.248:14938-15506	AT4G22720.2	PF00814	PTHR11735	KOG2708	3.4.24.57	K01409	O-sialoglycoprotein endopeptidase, putative, expressed
MDC007568.248:16771-17120	AT2G40470.1	PF03195					DUF260 domain containing protein, putative, expressed
MDC007582.375:15700-16040	AT4G19185.1	PF00892					nodulin, putative, expressed
MDC007598.175:7142-7412	AT4G19185.1	PF00892					nodulin, putative, expressed
MDC007598.175:13744-13944	AT1G31500.4	PF03372	PTHR12121	KOG0620			endonuclease/exonuclease/phosphatase family domain containing protein, expressed
MDC007614.448:8696-9035	AT3G23600.2	PF01738	PTHR17630	KOG3043			endo-1,3;1,4-beta-D-glucanase precursor, putative, expressed
MDC007624.239:4383-4761	AT5G41800.1	PF01490	PTHR22950	KOG1303			transmembrane amino acid transporter protein, putative, expressed
MDC00812.292:23731-24364	AT2G01480.1	PF10250					growth regulator related protein, putative
MDC007641.311:4854-5781	AT4G32300.1	PF01453,PF00069,PF07714	PTHR23258	KOG1187			lectin protein kinase family protein, putative, expressed
MDC007651.256:7095-7497	AT2G18030.1	PF01625	PTHR10173	KOG1635			peptide methionine sulfoxide reductase, putative, expressed
MDC007657.717:4681-5123	AT5G42960.1						DANA2, putative, expressed
MDC007713.205:2812-3135	AT4G13195.1						
MDC007725.313:21618-22339	AT1G11170.1	PF05212					lysine ketoglutarate reductase trans-splicing related 1, putative, expressed
MDC007736.142:17091-17712	AT4G30770.1						expressed protein
MDC00813.771:2702-3359	AT1G74530.3						expressed protein
MDC007790.237:180-282	AT2G02090.1	PF00176,PF00271	PTHR10799	KOG0389	3.6.4.12	K14439	SNF2 family N-terminal domain containing protein, expressed
MDC007791.237:10017-10398	AT1G76900.2	PF00646,PF01167	PTHR16517	KOG2502			OsFBT7 - F-box and tubby domain containing protein, expressed
MDC007792.401:10562-11508	AT2G33730.1	PF00270,PF00271	PTHR10967	KOG0333	3.6.4.13	K12858	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC007792.401:29323-29673	AT4G08770.1	PF00141			1.1.1.1.7	K00430	peroxidase precursor, putative, expressed
MDC007858.422:10539-10754	AT5G05340.1	PF00141			1.1.1.1.7	K00430	peroxidase precursor, putative, expressed
MDC007858.422:12370-12964	AT2G47900.3	PF00646,PF01167	PTHR16517	KOG2502			OsFBT5 - F-box and tubby domain containing protein, expressed
MDC007953.177:16669-16974	AT1G12410.1	PF00574	PTHR10381	KOG0840	3.4.21.92	K01358	OsCip9 - Putative Clp protease homologue, expressed
MDC008045.226:5778-6105	AT3G61430.2	PF00230	PTHR19139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC008099.122:14997-15532	AT4G23400.1	PF00230	PTHR19139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC008099.122:15720-15853	AT4G00300.2	PF11721					receptor-like protein kinase At3g46290 precursor, putative, expressed
MDC00814.336:7471-7949	AT1G01620.2	PF00230	PTHR19139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC008099.122:15946-16282	AT4G00430.1	PF00230	PTHR19139	KOG0223		K09872	aquaporin protein, putative, expressed
MDC008099.122:16388-16809	AT5G40240.2	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC008104.97:4350-4465	AT5G40230.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC008104.97:4893-5080	AT3G17490.1	PF00646,PF07734					OsFBX464 - F-box domain containing protein
MDC008108.99:7464-9223	AT2G34340.1	PF04520					DUF584 domain containing protein, putative, expressed
MDC008119.473:1280-1805	AT2G24100.1						expressed protein
MDC008177.674:13219-13664	AT4G12710.1	PF00514	PTHR23316	KOG4646			armadillo/beta-catenin repeat family protein, putative, expressed
MDC008184.205:8772-9239	AT1G54540.1	PF03168					harpin-induced protein 1 domain containing protein, expressed
MDC008212.498:491-1195	AT1G69410.1	PF00467,PF01287	PTHR11673	KOG3271		K03263	eukaryotic translation initiation factor 5A, putative, expressed
MDC008233.164:1510-1669	AT4G02420.1	PF00139,PF00069,PF07714	PTHR23258	KOG1187			receptor like protein kinase, putative, expressed
MDC008313.318:4207-4571	AT1G74530.3						expressed protein
MDC008325.354:8874-8959	AT5G17760.1	PF00004	PTHR23070	KOG0743			mitochondrial chaperone BCS1, putative, expressed
MDC008336.464:6231-7078	AT4G28210.1						
MDC008345.348:4511-4874	AT5G47470.1	PF00892					
MDC008453.913:10123-10374	AT4G21800.2	PF03029	PTHR21231	KOG1532		K06883	integral membrane protein DUF6 domain containing protein, expressed
MDC008485.183:6542-7083	AT5G42965.1						ATP binding protein, putative, expressed
MDC008496.393:3311-4214	AT5G47180.2	PF00635	PTHR10809	KOG0439			conserved hypothetical protein
MDC008501.186:4780-5080	AT2G24100.1						MSP domain containing protein, expressed
MDC008511.144:10693-11189	AT4G10360.2	PF03798	PTHR13439	KOG4561			expressed protein
MDC008521.354:1690-2152	AT1G06650.2	PF03171	PTHR10209	KOG0143			transmembrane protein 56, putative, expressed
MDC00835.215:2033-2459	AT1G30970.2		PTHR23215	KOG2893			1-aminocyclopropane-1-carboxylate oxidase homolog 2, putative, expressed
MDC008558.180:2276-23209	AT5G27770.1	PF01776	PTHR10064	KOG3434		K02891	ZOS9-19 - C2H2 zinc finger protein, expressed
MDC008575.351:1527-1902	AT5G27770.1	PF01776	PTHR10064	KOG3434		K02891	60S ribosomal protein L22-2, putative, expressed
MDC008575.351:2734-2941	AT5G41330.1	PF02214	PTHR11145	KOG2714			60S ribosomal protein L22-2, putative, expressed
MDC008579.487:3510-3869	AT1G71950.1	PF05922	PTHR10795				B4-BT84 - Bric-a-Brac, Tramtrack, Broad Complex BTB domain with B4 subfamily conserved sequence, expressed
MDC008657.482:3281-3527	AT4G12020.3	PF02671,PF03106,PF00931,PF07725,PF00560,PF00069,PF07714	PTHR22986	KOG0198			subtilisin N-terminal Region family protein, expressed
MDC008801.230:1128-1609	AT1G07510.1	PF06480,PF00004,PF01434	PTHR23076	KOG0731	3.4.24.-	K08956	STE_MEKK_ste11_MAP3K.12 - STE kinases include homologs to sterile 7, sterile 11 and sterile 20 from yeast, expressed
MDC008815.152:3297-3548	AT1G50670.1	PF02338	PTHR13312		3.1.2.-	K13719	OsFtsH8 FtsH protease, homologue of AtFtsH3/10, expressed
MDC008844.652:13597-13959	AT1G20430.1		PTHR21568				OTU-like cysteine protease family protein, putative, expressed
MDC008880.141:64155-64719	AT2G36985.1	PF08137					expressed protein
MDC008909.172:124-491	AT1G20980.1	PF03110					expressed protein
MDC008927.255:16667-17470	AT5G66780.1						OsSPL15 - SBP-box gene family member, expressed
MDC008947.382:12415-12822	AT1G30760.1	PF01565,PF08031	PTHR11748				expressed protein
MDC008945.305:5283-5857	AT1G11910.1	PF00026,PF03489,PF05184	PTHR13683	KOG1339	3.4.23.40	K08245	reticuline oxidase-like protein precursor, putative, expressed
MDC008968.446:15847-16400	AT4G31750.1	PF00481	PTHR13832	KOG0698			aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC009079.262:4671-4942	AT4G31750.1	PF00481	PTHR13832	KOG0698			protein phosphatase 2C, putative, expressed
MDC009079.262:6115-6244	AT4G31750.1	PF00481	PTHR13832	KOG0698			protein phosphatase 2C, putative, expressed
MDC009079.262:7239-7401	AT1G25510.1		PTHR13683	KOG1339			protein phosphatase 2C, putative, expressed
MDC00851.382:15529-16034	AT5G40230.1	PF00892					aspartic proteinase, putative, expressed
MDC009088.260:67-301	AT3G28050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC009088.260:680-830	AT3G28050.1	PF00892					auxin-induced protein 5NG4, putative, expressed
MDC009088.260:987-1845	AT4G37270.1	PF00122,PF00702	PTHR11939	KOG0207			auxin-induced protein 5NG4, putative, expressed
MDC009100.743:18942-19318	AT5G58950.1	PF07714,PF00069	PTHR23257	KOG0192			cadmium/zinc-transporting ATPase, putative, expressed
							protein kinase domain containing protein, expressed

MDC009128.602:32330-32740	AT2G23090.1	PF04419					expressed protein
MDC009154.309:1280-1387	AT3G60210.1	PF00166		PTHR10772	KOG1641		chaperonin, putative, expressed
MDC009197.269:132-321	AT1G24260.3	PF00319,PF01486		PTHR11945	KOG0014		OsMADS7 - MADS-box family gene with MlKcC type-box, expressed
MDC009276.331:6201-6936	AT1G58120.1						CPUORF38 - conserved peptide uORF-containing transcript, expressed
MDC009282.275:3906-4729	AT1G16900.1	PF03901		PTHR22760	KOG2515	2.4.1.-	Alg9-like mannosyltransferase protein, putative, expressed
MDC009291.126:1104-1457	AT5G59970.1	PF00125		PTHR10484	KOG3467		Core histone H2A/H2B/H3/H4 domain containing protein, putative, expressed
MDC009303.382:1557-1878	AT1G51060.1	PF00125,PF00808		PTHR23430	KOG1756		core histone H2A/H2B/H3/H4, putative, expressed
MDC00876.364:2401-2783	AT5G38200.1	PF07722					
MDC009325.280:310-749	AT2G39730.1	PF00004			KOG0651		AAA-type ATPase family protein, putative, expressed
MDC009368.188:2702-3008	AT5G36930.2	PF01582,PF00560,PF00931,PF07725		PTHR23155	KOG4658		disease resistance protein RGA3, putative, expressed
MDC009423.544:1637-2373	AT2G17420.1	PF07992,PF00070		PTHR22912	KOG0404	1.8.1.9	thioredoxin reductase 2, putative, expressed
MDC009436.50:32007-32411	AT3G45140.1	PF01477,PF00305		PTHR11771		1.13.11.12	lipoygenase, putative, expressed
MDC009458.215:14228-14402	AT5G56670.1	PF04758		PTHR12650	KOG0009		expressed protein
MDC009483.38:3322-3461	AT5G47310.1	PF05903		PTHR12378	KOG0324		ethylene-responsive element-binding protein, putative, expressed
MDC009489.259:582-956	AT5G47310.1	PF05903		PTHR12378	KOG0324		ethylene-responsive element-binding protein, putative, expressed
MDC009489.259:2379-2689	AT5G47310.1	PF05903		PTHR12378	KOG0324		ethylene-responsive element-binding protein, putative, expressed
MDC009489.375:2207-2531	AT2G23570.1						OsPOP4 - Putative Prolyl Oligopeptidase homologue, expressed
MDC009490.558:6365-6741	AT2G31600.1						expressed protein
MDC009501.247:2219-2729	AT4G16143.2	PF01749,PF00514,PF02985,PF03130		PTHR23316	KOG0166		importin subunit alpha, putative, expressed
MDC009595.146:45-416	AT3G14430.1						expressed protein
MDC009596.264:70-344	AT2G20290.1	PF02736,PF00063,PF00612,PF01843		PTHR13140	KOG0160		myosin, putative, expressed
MDC009602.113:10106-10498	AT1G71950.1	PF05922		PTHR10795			subtilisin N-terminal Region family protein, expressed
MDC009615.292:631-756	AT4G38790.1	PF00810		PTHR10585	KOG3106		ER lumen protein retaining receptor, putative, expressed
MDC009626.195:1302-1624	AT5G41760.2	PF04142		PTHR10231	KOG2234		UAA transporter family domain containing protein, expressed
MDC000140.134:54551-54847	AT5G10180.1	PF00916,PF01740		PTHR11814	KOG0236		sulfate transporter, putative, expressed
MDC009685.334:6702-7096	AT1G75460.1	PF02190		PTHR23327	KOG4159		ATP-dependent protease, putative, expressed
MDC009708.152:51041-51699	AT5G40150.1	PF00141				1.1.1.7	peroxidase family protein, expressed
MDC000908.450:4034-4471	AT3G04730.1	PF02309					OsIAA30 - Auxin-responsive Aux/IAA gene family member, expressed
MDC009814.418:6273-6657	AT4G17690.1	PF00141				1.1.1.7	peroxidase family protein, expressed
MDC000908.450:4523-5057	AT4G14550.1	PF02309					OsIAA30 - Auxin-responsive Aux/IAA gene family member, expressed
MDC009814.418:7581-7800	AT3G28430.1	PF09758		PTHR21481	KOG2219		expressed protein
MDC009830.368:4257-4492	AT5G65780.1	PF01063		PTHR11825	KOG0975	2.6.1.42	aminotransferase domain containing protein, putative, expressed
MDC009850.21:558-987	AT1G19580.1	PF00132		PTHR22572	KOG4042		bacterial transferase hexapeptide domain containing protein, expressed
MDC009856.139:35298-35913	AT1G06990.1	PF00657		PTHR22835,SF27			GDSL-like lipase/acetylhydrolase, putative, expressed
MDC009859.245:7701-7947	AT1G16180.2	PF03348		PTHR10383	KOG2592		TMS membrane protein/tumour differentially expressed protein, putative, expressed
MDC009907.294:23684-23868	AT1G16180.2	PF03348		PTHR10383	KOG2592		TMS membrane protein/tumour differentially expressed protein, putative, expressed
MDC009907.294:24320-24561	AT1G16180.2	PF03348		PTHR10383	KOG2592		TMS membrane protein/tumour differentially expressed protein, putative, expressed
MDC009907.294:24876-25099	AT4G34700.1	PF05347		PTHR12868	KOG3466	1.6.5.3,1.6.99	Lyr motif containing protein, putative, expressed
MDC009946.417:4427-4703	AT5G37600.1	PF03951,PF00120		PTHR20852	KOG0683	6.3.1.2	glutamine synthetase, catalytic domain containing protein, expressed
MDC009950.283:2248-2601	AT1G66200.3	PF03951,PF00120		PTHR20852	KOG0683		glutamine synthetase, catalytic domain containing protein, expressed
MDC009950.283:3474-3584	AT5G37600.1	PF03951,PF00120		PTHR20852	KOG0683	6.3.1.2	glutamine synthetase, catalytic domain containing protein, expressed
MDC009950.283:3884-4023	AT5G37600.1	PF03951,PF00120		PTHR20852	KOG0683	6.3.1.2	glutamine synthetase, catalytic domain containing protein, expressed
MDC009950.283:4266-4401	AT5G16570.1	PF03951,PF00120		PTHR20852	KOG0683	6.3.1.2	glutamine synthetase, catalytic domain containing protein, expressed
MDC009950.288:5596-6266	AT5G32470.1	PF03070		PTHR20858			TENA/THI-4 family protein, putative, expressed
MDC009976.359:12472-13055	AT5G32470.1	PF03070		PTHR20858			TENA/THI-4 family protein, putative, expressed
MDC009976.359:13136-13571	AT2G36070.1	PF04280		PTHR10721	KOG2580		tim44-like domain containing protein, expressed
MDC009991.166:1671-1911	AT4G23160.1	PF07727,PF01657,PF00069,PF07714,PF11883		PTHR11439	KOG1187		TKL_IRAK_DUF26-1c.20 - DUF26 kinases have homology to DUF26 containing loci, expressed
MDC009992.373:5233-5529	AT5G02230.2	PF00702		PTHR18901	KOG3109		haloacid dehalogenase-like hydrolase family protein, putative, expressed
MDC010058.303:36260-36547	AT5G41800.1	PF01490		PTHR22950	KOG1303		transmembrane amino acid transporter protein, putative, expressed
MDC010065.349:3326-3668	AT2G22640.1						BRICK1, putative, expressed
MDC010071.397:392-525	AT1G56700.3			PTHR23402	KOG4755		pyrrolidone-carboxylate peptidase, putative, expressed
MDC000997.260:16008-16410	AT4G16450.2						expressed protein
MDC010085.172:13-504	AT3G10050.1	PF00291,PF00585		PTHR10314	KOG1250	4.3.1.19	threonine dehydratase biosynthetic, chloroplast precursor, putative, expressed
MDC010099.229:4737-5125	AT5G06700.1	PF03005					leaf senescence related protein, putative, expressed
MDC010104.1012:30864-31577	AT2G32000.2	PF01751,PF01131		PTHR11390	KOG1957	5.99.1.2	DNA topoisomerase 3 protein, putative, expressed
MDC010172.365:23895-24342	AT2G37170.1	PF00230		PTHR19139	KOG0223		aquaporin protein, putative, expressed
MDC010185.231:6884-7177	AT1G56700.3			PTHR23402	KOG4755		pyrrolidone-carboxylate peptidase, putative, expressed
MDC000997.260:17123-17228	AT3G50590.1	PF00400		PTHR12816			WD domain, G-beta repeat domain containing protein, expressed
MDC010186.403:23504-23954	AT5G26800.1	PF09597					expressed protein
MDC010192.333:5522-5655	AT3G12360.1	PF00023		PTHR18958	KOG4412		ankyrin repeat-containing protein, putative, expressed
MDC010192.348:12503-13571	AT5G62790.2	PF02670,PF08436				1.1.1.267	1-deoxy-D-xylulose 5-phosphate reductoisomerase, chloroplast precursor, putative, expressed
MDC010200.476:4261-4691	AT5G62790.2	PF02670,PF08436				1.1.1.267	1-deoxy-D-xylulose 5-phosphate reductoisomerase, chloroplast precursor, putative, expressed
MDC010200.476:4901-5052	AT5G51970.2	PF08240,PF00107				1.1.1.14	dehydrogenase, putative, expressed
MDC010241.223:17213-18085	AT1G23440.1			PTHR11695	KOG0024		pyrrolidone-carboxylate peptidase, putative, expressed
MDC000997.260:17440-17768	AT5G40350.1	PF00249		PTHR10641	KOG0048		MYB family transcription factor, putative
MDC010252.317:1021-1375	AT5G64360.4	PF00226		PTHR11821			heat shock protein DnaJ, putative, expressed
MDC010254.244:14459-14910	AT3G56150.2	PF05470,PF01399		PTHR13937	KOG1076		eukaryotic translation initiation factor 3 subunit C, putative, expressed
MDC010268.425:12245-12627	AT3G42860.1	PF06839,PF00098		PTHR23002	KOG4400		GRF zinc finger family protein, expressed
MDC010300.238:15044-16078	AT3G55640.1	PF00153		PTHR11896	KOG0752		mitochondrial carrier protein, putative, expressed
MDC010318.100:9492-9884	AT3G19080.1	PF08766,PF02201		PTHR13844	KOG1946		upstream activation factor subunit spp27, putative, expressed
MDC010319.227:8072-8321	AT1G49820.1	PF01636					methylthioribose kinase, putative, expressed
MDC010325.233:4683-4903	AT1G48300.1						expressed protein
MDC010328.213:18449-19160	AT1G62290.2	PF00026,PF03489,PF05184		PTHR13683	KOG1339	3.4.23.40	aspartic proteinase oryzasin-1 precursor, putative, expressed
MDC010328.215:28204-28446	AT3G46890.1						expressed protein
MDC010431.261:2731-2961	AT2G19080.1			PTHR12289	KOG3028		expressed protein
MDC010441.401:17991-18191	AT5G49525.1						expressed protein
MDC010450.908:6750-7226	AT1G08530.1						expressed protein
MDC010450.949:3543-4321	AT5G45970.1	PF00071,PF08477		PTHR11708	KOG0393		ras-related protein, putative, expressed
MDC001007.507:15632-16109	AT2G02130.1	PF07333,PF00304					DEF8 - Defensin and Defensin-like DEFL family, expressed
MDC010466.196:24-204	AT5G56170.1						GPI-anchored protein, putative, expressed

MDC010492.245:666-1340	AT5G36110.1	PF00067	PTHR19383	KOG0157			cytochrome P450, putative, expressed
MDC010598.348:9370-9523	AT1G32340.1	PF05773,PF00097,PF01485	PTHR11685	KOG1814	6.3.2.19	K11971	ara54-like RING finger protein, putative, expressed
MDC010640.116:5178-5493	AT4G12760.1						expressed protein
MDC010687.251:5882-6163	AT4G21810.1	PF04511	PTHR11009	KOG0858			Der1-like family domain containing protein, expressed
MDC010697.307:4965-5070	AT4G35790.1	PF00168,PF00614,PF12357	PTHR18896	KOG1329			phospholipase D, putative, expressed
MDC010709.414:585-1037	AT1G02090.3	PF01399	PTHR15350	KOG3250		K12180	proteasome subunit, putative, expressed
MDC010751.335:5076-5282	AT5G27870.1	PF04043,PF01095,PF04886					pectinesterase, putative, expressed
MDC010779.408:15723-16139	AT3G61060.1	PF00646					OsFBX391 - F-box domain containing protein, expressed
MDC010783.139:10332-11071	AT3G61060.1	PF00646					OsFBX391 - F-box domain containing protein, expressed
MDC010783.139:11498-12068	AT1G49700.2	PF09713					plant-specific domain TIGR01589 family protein, putative, expressed
MDC010817.271:27525-27737	AT3G15360.1	PF00085	PTHR10438	KOG0910			thioredoxin, putative, expressed
MDC010842.294:4654-4752	AT1G15520.1	PF00005,PF01061,PF08370	PTHR19241	KOG0065			pleiotropic drug resistance protein, putative, expressed
MDC010937.194:12046-12338	AT5G66900.1	PF05659,PF00931,PF00560	PTHR23155	KOG4658			disease resistance protein, putative, expressed
MDC010969.378:7112-8073	AT3G51430.2	PF03088	PTHR10426	KOG1520			strictosidine synthase, putative, expressed
MDC001040.307:555-1041	AT4G14960.2	PF00091,PF03953	PTHR11588	KOG1376		K07374	tubulin/FtsZ domain containing protein, putative, expressed
MDC001048.310:7356-8038	AT3G15630.1						expressed protein
MDC011163.587:1351-1663	AT3G51000.1	PF12146,PF00561	PTHR10992	KOG4178			hydrolase, alpha/beta fold family domain containing protein, expressed
MDC011167.337:32-262	AT5G48100.1	PF07732,PF00394,PF07731	PTHR11709	KOG1263			laccase precursor protein, putative, expressed
MDC011283.393:3854-4077	AT3G21610.2	PF02681					Divergent PAP2 family domain containing protein, expressed
MDC011325.298:41258-41415	AT3G51240.1	PF03171	PTHR10209	KOG0143	1.14.11.9	K00475	naringenin,2-oxoglutarate 3-dioxygenase, putative, expressed
MDC011373.244:3946-4433	AT3G51240.2	PF03171	PTHR10209	KOG0143	1.14.11.9	K00475	naringenin,2-oxoglutarate 3-dioxygenase, putative, expressed
MDC011373.244:4627-5027	AT3G51240.2	PF03171	PTHR10209	KOG0143	1.14.11.9	K00475	naringenin,2-oxoglutarate 3-dioxygenase, putative, expressed
MDC011373.244:5822-6338	AT4G09830.1						holocarboxylase synthetase, putative, expressed
MDC011377.138:14053-14246	AT4G09830.1						holocarboxylase synthetase, putative, expressed
MDC011377.138:16729-17502	AT1G22790.2						expressed protein
MDC011377.138:23384-24008	AT1G34000.1						high light inducible protein, putative, expressed
MDC011377.138:30623-31125	AT1G34000.1						high light inducible protein, putative, expressed
MDC011377.138:31736-32194	AT1G72730.1	PF00270,PF00271	PTHR10967	KOG0327		K03257	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC011423.269:13482-14391	AT1G54270.2	PF00270,PF00271	PTHR10967	KOG0327		K03257	DEAD-box ATP-dependent RNA helicase, putative, expressed
MDC011423.269:14495-14923	AT5G20350.1	PF00023,PF01529	PTHR22883	KOG0509			palmitoyltransferase TIP1, putative, expressed
MDC011475.283:13870-14453	AT1G69450.2	PF02714	PTHR13018	KOG1134			DUF221 domain containing protein, expressed
MDC011493.183:13848-14159	AT4G23330.2						