

Heat Stress Responsive <i>Zostera marina</i> Genes, Northern Population ($\alpha=0.01$)	
METACYC ID	Description
A0AR23	GO:0004842 (ubiquitin-protein ligase)
A1XQQ5	
A1ZA72	GO:0004687 (myosin light chain kinase)
A2AGL8	GO:0004842 (ubiquitin-protein ligase)
A4GNA8	GO:0004609 (phosphatidylserine decarboxylase)
A5WUL6	GO:0004129 (cytochrome-c oxidase)
A6N6K7	
A9LDD9	GO:0004372 (glycine hydroxymethyltransferase)
B0BN46	GO:0030267 (glyoxylate reductase (NADP))
B1ANK7	
B2R5V5	
B3DGQ0	GO:0004842 (ubiquitin-protein ligase)
B4K9W3	
O00217	GO:0008137 (NADH dehydrogenase (ubiquinone))
O04130	GO:0004617 (phosphoglycerate dehydrogenase)
O04379	GO:0004521 (endoribonuclease)
O04905	GO:0009041 (uridylate kinase)
O04928	GO:0004605 (phosphatidate cytidyltransferase)
O04983	GO:0003989 (acetyl-CoA carboxylase)
O08560	GO:0004143 (diacylglycerol kinase)
O08841	
O13696	GO:0004449 (isocitrate dehydrogenase (NAD+))
O13792	GO:0004004 (ATP-dependent RNA helicase)
O13811	GO:0015035 (protein disulfide oxidoreductase)
O13849	GO:0004185 (serine-type carboxypeptidase)
O13877	GO:0003899 (DNA-directed RNA polymerase)
O14122	GO:0004842 (ubiquitin-protein ligase)
O14295	GO:0050236 (pyridoxine 4-dehydrogenase)
O14459	GO:0003899 (DNA-directed RNA polymerase)
O22203	GO:0046409 (p-coumarate 3-hydroxylase)
O22229	GO:0004791 (thioredoxin-disulfide reductase)
O22287	GO:0004475 (mannose-1-phosphate guanylyltransferase)
O22446	GO:0004407 (histone deacetylase)
O22609	GO:0008236 (serine-type peptidase)
O22678	
O23044	GO:0004601 (peroxidase)
O23066	GO:0008393 (fatty acid (omega-1)-hydroxylase)
O23141	GO:0008792 (arginine decarboxylase)
O23166	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
O23255	GO:0004013 (adenosylhomocysteinase)
O23299	GO:0004165 (dodecenoyl-CoA delta-isomerase)
O23461	GO:0009702 (L-arabinokinase)
O23627	
O23649	
O23680	GO:0003924 (GTPase)
O23722	GO:0004163 (diphosphomevalonate decarboxylase)

O24035	
O24435	GO:0004672 (protein kinase)
O24496	GO:0004416 (hydroxyacylglutathione hydrolase)
O30561	
O34125	
O35940	
O43283	GO:0004709 (MAP kinase kinase kinase)
O43708	
O48722	GO:0004392 (heme oxygenase (decyclizing))
O48814	GO:0016301 (kinase)
O48962	GO:0000247 (C-8 sterol isomerase)
O49081	
O49196	GO:0004020 (adenylylsulfate kinase)
O49213	GO:0050577 (GDP-L-fucose synthase)
O49354	GO:0010420 (polyprenyldihydroxybenzoate methyltransferase)
O49434	GO:0047652 (allantoate deiminase)
O49499	GO:0042409 (caffeoyl-CoA O-methyltransferase)
O49543	GO:0031071 (cysteine desulfurase)
O49562	GO:0004721 (phosphoprotein phosphatase)
O50008	GO:0008705 (methionine synthase)
O55035	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
O55234	GO:0008233 (peptidase)
O58651	
O58762	
O59413	
O60078	GO:0004665 (prephenate dehydrogenase (NADP+))
O60260	GO:0004842 (ubiquitin-protein ligase)
O60344	GO:0004222 (metalloendopeptidase)
O60832	GO:0003720 (telomerase)
O60869	GO:0008168 (methyltransferase)
O64425	GO:0004842 (ubiquitin-protein ligase)
O64437	
O64654	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
O64763	GO:0004842 (ubiquitin-protein ligase)
O64867	GO:0004842 (ubiquitin-protein ligase)
O64903	GO:0004550 (nucleoside diphosphate kinase)
O64925	
O65041	GO:0019781 (NEDD8 activating enzyme)
O65201	GO:0003997 (acyl-CoA oxidase)
O65202	GO:0003997 (acyl-CoA oxidase)
O65351	GO:0004252 (serine-type endopeptidase)
O65572	GO:0045549 (9-cis-epoxycarotenoid dioxygenase)
O67577	
O70196	GO:0004175 (endopeptidase)
O73884	
O75251	GO:0003954 (NADH dehydrogenase)
O75575	GO:0003899 (DNA-directed RNA polymerase)
O80013	

O80433	
O80452	GO:0003876 (AMP deaminase)
O80477	GO:0016788 (hydrolase activity, acting on ester bonds)
O80673	GO:0004683 (calmodulin-dependent protein kinase)
O80725	GO:0008559 (xenobiotic-transporting ATPase)
O80840	GO:0004615 (phosphomannomutase)
O80860	
O81108	GO:0005388 (calcium-transporting ATPase)
O81129	GO:0004430 (1-phosphatidylinositol 4-kinase)
O81235	GO:0004784 (superoxide dismutase)
O81413	
O81635	GO:0016887 (ATPase)
O81646	
O81770	GO:0046509 (1,2-diacylglycerol 3-beta-galactosyltransferase)
O81884	GO:0010349 (L-galactose dehydrogenase)
O82030	
O82110	
O82261	GO:0004252 (serine-type endopeptidase)
O82413	
O82462	
O82768	GO:0004636 (phosphoribosyl-ATP diphosphatase)
O82782	GO:0003949 (1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino]imidazole-4-carboxamide isomerase)
O82796	GO:0004647 (phosphoserine phosphatase)
O88738	GO:0004842 (ubiquitin-protein ligase)
O88766	GO:0008237 (metallopeptidase)
O94616	GO:0003899 (DNA-directed RNA polymerase)
O94710	GO:0004252 (serine-type endopeptidase)
O95271	GO:0003950 (NAD+ ADP-ribosyltransferase)
O95336	
O95363	GO:0004826 (phenylalanine-tRNA ligase)
O95391	GO:0000386 (second spliceosomal transesterification)
O95476	GO:0004722 (protein serine/threonine phosphatase)
O96780	
O96787	
O96788	
O97159	GO:0016887 (ATPase)
P00163	GO:0045153 (electron transporter, transferring electrons within CoQH2-cytochrome c reductase complex)
P00401	GO:0004129 (cytochrome-c oxidase)
P00560	GO:0004618 (phosphoglycerate kinase)
P00582	
P00956	
P02563	GO:0030899 (calcium-dependent ATPase)
P02829	GO:0042623 (ATPase activity, coupled)
P02992	GO:0003924 (GTPase)
P03355	
P04801	GO:0004829 (threonine-tRNA ligase)

P04802	GO:0004815 (aspartate-tRNA ligase)
P04805	
P04825	
P05149	
P05314	
P05466	GO:0003866 (3-phosphoshikimate 1-carboxyvinyltransferase)
P05895	
P06576	GO:0046961 (hydrogen ion transporting ATPase activity, rotational mechanism)
P06634	GO:0003724 (RNA helicase)
P07143	GO:0045153 (electron transporter, transferring electrons within CoQH2-cytochrome c reductase complex)
P07245	GO:0004488 (methylenetetrahydrofolate dehydrogenase (NADP+))
P07251	GO:0016887 (ATPase)
P07284	GO:0004828 (serine-tRNA ligase)
P07560	GO:0003924 (GTPase)
P07639	
P07649	
P07858	GO:0008233 (peptidase)
P07991	
P08678	GO:0004016 (adenylate cyclase)
P0A3C9	GO:0009055 (electron carrier)
P0A6A0	
P0A6K3	
P0A7A2	
P0A850	
P0A8F4	
P0A8Y1	
P0A8Y5	
P0A9L5	
P0A9P9	
P0AB65	
P0AB89	
P0ABQ2	
P0ABU0	
P0ACC1	
P0ADF6	
P0AEH1	
P0AEI1	
P0AERO	
P0AG24	
P0C028	GO:0008486 (diphosphoinositol-polyphosphate diphosphatase)
P10507	GO:0004222 (metalloendopeptidase)
P10591	GO:0016887 (ATPase)
P10742	
P11017	GO:0003924 (GTPase)
P11035	GO:0009703 (nitrate reductase (NADH))
P11155	
P11875	

P11914	GO:0004222 (metalloendopeptidase)
P12340	
P12398	GO:0016887 (ATPase)
P12412	
P13433	GO:0003899 (DNA-directed RNA polymerase)
P13650	
P14605	GO:0004016 (adenylate cyclase)
P14654	
P14656	
P14671	GO:0004834 (tryptophan synthase)
P15347	
P15367	GO:0008233 (peptidase)
P15454	GO:0004385 (guanylate kinase)
P15565	GO:0004809 (tRNA (guanine-N2-)-methyltransferase)
P15873	GO:0030337 (DNA polymerase processivity factor)
P16127	GO:0016887 (ATPase)
P16140	GO:0046961 (hydrogen ion transporting ATPase activity, rotational mechanism)
P17597	GO:0003984 (acetolactate synthase)
P17606	
P17751	GO:0016853 (isomerase)
P17784	GO:0004332 (fructose-bisphosphate aldolase)
P18203	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
P18769	
P18899	GO:0016887 (ATPase)
P19146	GO:0003924 (GTPase)
P19171	GO:0004568 (chitinase)
P19404	GO:0008137 (NADH dehydrogenase (ubiquinone))
P19456	GO:0008553 (hydrogen-exporting ATPase activity, phosphorylative mechanism)
P19734	GO:0018662 (phenol 2-monooxygenase)
P19882	GO:0016887 (ATPase)
P20081	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
P20447	GO:0008186 (RNA-dependent ATPase)
P20606	GO:0003924 (GTPase)
P20649	GO:0016887 (ATPase)
P21128	GO:0008236 (serine-type peptidase)
P21461	GO:0016874 (ligase)
P21888	
P22146	GO:0042124 (1,3-beta-glucanosyltransferase)
P22337	
P22579	GO:0004407 (histone deacetylase)
P22894	GO:0004252 (serine-type endopeptidase)
P23111	
P23321	GO:0010242 (oxygen evolving)
P23396	GO:0004519 (endonuclease)
P23686	GO:0004478 (methionine adenosyltransferase)
P23968	GO:0008553 (hydrogen-exporting ATPase activity, phosphorylative mechanism)

P24101	GO:0004601 (peroxidase)
P24155	GO:0008233 (peptidase)
P24384	GO:0000386 (second spliceosomal transesterification)
P24704	GO:0004784 (superoxide dismutase)
P24788	
P25038	GO:0003924 (GTPase)
P25087	GO:0003838 (sterol 24-C-methyltransferase)
P25161	GO:0004175 (endopeptidase)
P25296	GO:0004723 (calcium-dependent protein serine/threonine phosphatase)
P25372	GO:0015036 (disulfide oxidoreductase)
P25582	GO:0016435 (rRNA (guanine) methyltransferase)
P25656	GO:0004012 (phospholipid-translocating ATPase)
P25694	GO:0016887 (ATPase)
P25704	
P25819	GO:0004096 (catalase)
P25856	
P25857	
P26221	
P26270	GO:0004175 (endopeptidase)
P26640	GO:0004832 (valine-tRNA ligase)
P27298	
P28331	GO:0008137 (NADH dehydrogenase (ubiquinone))
P28337	
P28777	GO:0042602 (flavin reductase)
P29029	GO:0008843 (endochitinase)
P29102	
P29218	GO:0008934 (inositol-1(or 4)-monophosphatase)
P29250	GO:0016165 (lipoxygenase)
P29448	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
P30041	GO:0004623 (phospholipase A2)
P30044	GO:0004601 (peroxidase)
P30136	
P30792	
P31040	GO:0000104 (succinate dehydrogenase)
P31166	GO:0003999 (adenine phosphoribosyltransferase)
P31244	GO:0008094 (DNA-dependent ATPase)
P31383	GO:0004722 (protein serine/threonine phosphatase)
P31384	GO:0000175 (3'-5'-exoribonuclease)
P31414	GO:0009678 (hydrogen-translocating pyrophosphatase)
P32381	GO:0016887 (ATPase)
P32469	GO:0004164 (diphthine synthase)
P32473	GO:0004739 (pyruvate dehydrogenase (acetyl-transferring))
P32642	GO:0015036 (disulfide oxidoreductase)
P32660	GO:0004012 (phospholipid-translocating ATPase)
P32835	GO:0003924 (GTPase)
P32836	GO:0003924 (GTPase)
P33363	
P33643	

P34047	GO:0004424 (imidazoleglycerol-phosphate dehydratase)
P34099	
P34243	GO:0043141 (ATP-dependent 5'-3' DNA helicase)
P34314	GO:0004674 (protein serine/threonine kinase)
P34525	
P34790	
P34791	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
P34896	GO:0004372 (glycine hydroxymethyltransferase)
P34897	GO:0004372 (glycine hydroxymethyltransferase)
P34909	GO:0004842 (ubiquitin-protein ligase)
P35055	
P35132	GO:0004842 (ubiquitin-protein ligase)
P35134	GO:0004842 (ubiquitin-protein ligase)
P35434	GO:0016887 (ATPase)
P35510	
P35580	GO:0030898 (actin-dependent ATPase)
P35999	GO:0004222 (metalloendopeptidase)
P36048	GO:0003924 (GTPase)
P36096	GO:0004842 (ubiquitin-protein ligase)
P36104	GO:0042800 (histone lysine N-methyltransferase activity (H3-K4 specific))
P36163	GO:0004222 (metalloendopeptidase)
P36542	GO:0016887 (ATPase)
P36590	GO:0004798 (thymidylate kinase)
P36591	GO:0004146 (dihydrofolate reductase)
P36872	GO:0004722 (protein serine/threonine phosphatase)
P37271	
P38077	GO:0016887 (ATPase)
P38109	GO:0017171 (serine hydrolase)
P38116	GO:0003924 (GTPase)
P38143	GO:0047066 (phospholipid-hydroperoxide glutathione peroxidase)
P38197	GO:0008784 (alanine racemase)
P38205	GO:0016428 (tRNA (cytosine-5-)-methyltransferase)
P38219	GO:0016887 (ATPase)
P38238	GO:0008175 (tRNA methyltransferase)
P38242	GO:0004577 (N-acetylglucosaminyl diphosphodolichol N-acetylglucosaminyltransferase)
P38307	GO:0008233 (peptidase)
P38316	GO:0019776 (Atg8 ligase)
P38418	GO:0016165 (lipoxygenase)
P38555	GO:0003924 (GTPase)
P38629	GO:0016887 (ATPase)
P38659	GO:0003756 (protein disulfide isomerase)
P38712	GO:0008186 (RNA-dependent ATPase)
P38719	GO:0016887 (ATPase)
P38793	GO:0016423 (tRNA (guanine) methyltransferase)
P38797	GO:0004722 (protein serine/threonine phosphatase)
P38806	GO:0043166 (H4/H2A histone acetyltransferase)
P38911	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
P38989	GO:0016887 (ATPase)

P39206	
P39286	
P39517	GO:0003724 (RNA helicase)
P39524	GO:0004012 (phospholipid-translocating ATPase)
P39656	GO:0004579 (dolichyl-diphosphooligosaccharide-protein glycotransferase)
P39726	GO:0004375 (glycine dehydrogenase (decarboxylating))
P39730	GO:0003924 (GTPase)
P40024	GO:0042624 (ATPase activity, uncoupled)
P40025	
P40312	GO:0009055 (electron carrier)
P40318	GO:0004842 (ubiquitin-protein ligase)
P40350	GO:0004581 (dolichyl-phosphate beta-glucosyltransferase)
P40507	GO:0004652 (polynucleotide adenyltransferase)
P40581	GO:0047066 (phospholipid-hydroperoxide glutathione peroxidase)
P40945	GO:0003956 (NAD(P)+-protein-arginine ADP-ribosyltransferase)
P40946	GO:0003956 (NAD(P)+-protein-arginine ADP-ribosyltransferase)
P41409	
P41543	GO:0004579 (dolichyl-diphosphooligosaccharide-protein glycotransferase)
P41759	GO:0004618 (phosphoglycerate kinase)
P41888	GO:0004788 (thiamin diphosphokinase)
P41892	GO:0004674 (protein serine/threonine kinase)
P42697	GO:0003924 (GTPase)
P42738	GO:0004106 (chorismate mutase)
P42744	GO:0008641 (small protein activating enzyme)
P42745	GO:0004842 (ubiquitin-protein ligase)
P42748	GO:0004842 (ubiquitin-protein ligase)
P42770	GO:0004362 (glutathione-disulfide reductase)
P42799	GO:0042286 (glutamate-1-semialdehyde 2,1-aminomutase)
P42804	GO:0008883 (glutamyl-tRNA reductase)
P42862	GO:0016853 (isomerase)
P43254	GO:0004842 (ubiquitin-protein ligase)
P43288	
P43294	
P43311	
P43558	GO:0004843 (ubiquitin-specific protease)
P45724	
P45725	
P45844	GO:0034041 (sterol-transporting ATPase)
P46014	GO:0004721 (phosphoprotein phosphatase)
P46283	GO:0050278 (sedoheptulose-bisphosphatase)
P46309	GO:0004357 (glutamate-cysteine ligase)
P46310	GO:0042389 (omega-3 fatty acid desaturase)
P46421	GO:0004364 (glutathione transferase)
P46422	GO:0004364 (glutathione transferase)
P46462	GO:0016887 (ATPase)
P46573	
P46643	GO:0004069 (aspartate transaminase)
P46644	GO:0004069 (aspartate transaminase)
P46645	GO:0004069 (aspartate transaminase)

P46852	
P46875	GO:0016887 (ATPase)
P46934	GO:0004842 (ubiquitin-protein ligase)
P46943	GO:0003924 (GTPase)
P47052	GO:0008177 (succinate dehydrogenase (ubiquinone))
P47058	GO:0008251 (tRNA-specific adenosine deaminase)
P47122	GO:0016887 (ATPase)
P47735	
P47938	GO:0015036 (disulfide oxidoreductase)
P47968	GO:0004751 (ribose-5-phosphate isomerase)
P48047	GO:0016887 (ATPase)
P48163	GO:0004473 (malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+))
P48491	GO:0004807 (triose-phosphate isomerase)
P48622	GO:0042389 (omega-3 fatty acid desaturase)
P48623	GO:0042389 (omega-3 fatty acid desaturase)
P48642	
P49017	GO:0043334 (2-hexaprenyl-6-methoxy-1,4-benzoquinone methyltransferase)
P49095	GO:0004375 (glycine dehydrogenase (decarboxylating))
P49432	GO:0004739 (pyruvate dehydrogenase (acetyl-transferring))
P49572	GO:0004425 (indole-3-glycerol-phosphate synthase)
P49598	GO:0004722 (protein serine/threonine phosphatase)
P50076	GO:0004583 (dolichyl-phosphate-glucose-glycolipid alpha-glucosyltransferase)
P50107	GO:0004462 (lactoylglutathione lyase)
P50162	
P50947	GO:0004407 (histone deacetylase)
P51139	
P51566	
P51996	GO:0003924 (GTPase)
P52286	GO:0004842 (ubiquitin-protein ligase)
P52422	GO:0004644 (phosphoribosylglycinamide formyltransferase)
P52424	
P52480	GO:0004743 (pyruvate kinase)
P52701	GO:0016887 (ATPase)
P52917	GO:0016887 (ATPase)
P52920	GO:0016887 (ATPase)
P53197	GO:0004842 (ubiquitin-protein ligase)
P53259	GO:0008233 (peptidase)
P53312	GO:0004775 (succinate-CoA ligase (ADP-forming))
P53549	GO:0016887 (ATPase)
P53598	GO:0004775 (succinate-CoA ligase (ADP-forming))
P53611	
P53666	
P53738	GO:0008276 (protein methyltransferase)
P53739	GO:0004672 (protein kinase)
P53759	GO:0017150 (tRNA dihydrouridine synthase)
P53893	GO:0003924 (GTPase)

P53930	
P53946	GO:0043140 (ATP-dependent 3'-5' DNA helicase)
P54071	GO:0004450 (isocitrate dehydrogenase (NADP+))
P54150	
P54263	GO:0004816 (asparagine-tRNA ligase)
P54416	
P54873	GO:0004421 (hydroxymethylglutaryl-CoA synthase)
P54904	GO:0004735 (pyrroline-5-carboxylate reductase)
P55035	GO:0004175 (endopeptidase)
P55217	GO:0003962 (cystathionine gamma-synthase)
P55233	
P55826	GO:0004729 (protoporphyrinogen oxidase)
P56558	
P57681	GO:0001735 (prenylcysteine oxidase)
P59267	GO:0016409 (palmitoyltransferase)
P60662	GO:0030898 (actin-dependent ATPase)
P63319	GO:0004697 (protein kinase C)
P63331	GO:0004722 (protein serine/threonine phosphatase)
P68032	GO:0016887 (ATPase)
P69441	
P69834	GO:0050518 (2-C-methyl-D-erythritol 4-phosphate cytidyltransferase)
P70054	GO:0017108 (5'-flap endonuclease)
P70470	GO:0004622 (lysophospholipase)
P70881	
P75044	
P75728	
P77044	
P77781	
P80385	GO:0004679 (AMP-activated protein kinase)
P80386	GO:0004679 (AMP-activated protein kinase)
P82474	
P83218	
P84029	GO:0009055 (electron carrier)
P87123	GO:0003899 (DNA-directed RNA polymerase)
P90648	
P92949	GO:0000293 (ferric-chelate reductase)
P92958	GO:0004672 (protein kinase)
P92983	GO:0004657 (proline dehydrogenase)
P92994	GO:0016710 (trans-cinnamate 4-monooxygenase)
P93028	GO:0004842 (ubiquitin-protein ligase)
P93031	GO:0008446 (GDP-mannose 4,6-dehydratase)
P93422	
P93733	GO:0004630 (phospholipase D)
P93757	GO:0004385 (guanylate kinase)
P93805	
P93836	GO:0003868 (4-hydroxyphenylpyruvate dioxygenase)
P93941	
P94072	GO:0050162 (oxalate oxidase)
P97346	GO:0004791 (thioredoxin-disulfide reductase)

P98183	
P99999	GO:0045155 (electron transporter, transferring electrons from CoQH2-cytochrome c reductase complex and cytochrome c oxidase complex)
Q00218	GO:0003849 (3-deoxy-7-phosphoheptulonate synthase)
Q00667	
Q01205	
Q01320	GO:0003918 (DNA topoisomerase (ATP-hydrolyzing))
Q01519	GO:0004129 (cytochrome-c oxidase)
Q01939	GO:0016887 (ATPase)
Q01963	
Q02061	GO:0003899 (DNA-directed RNA polymerase)
Q02527	
Q02908	GO:0004402 (histone acetyltransferase)
Q02979	GO:0047389 (glycerophosphocholine phosphodiesterase)
Q03071	GO:0004842 (ubiquitin-protein ligase)
Q03161	GO:0047938 (glucose-6-phosphate 1-epimerase)
Q03529	GO:0000170 (sphingosine hydroxylase)
Q03532	GO:0008186 (RNA-dependent ATPase)
Q03920	GO:0008757 (S-adenosylmethionine-dependent methyltransferase)
Q04344	GO:0033699 (DNA 5'-adenosine monophosphate hydrolase)
Q04806	GO:0004364 (glutathione transferase)
Q05568	GO:0004842 (ubiquitin-protein ligase)
Q05787	GO:0004842 (ubiquitin-protein ligase)
Q05924	GO:0042578 (phosphoric ester hydrolase)
Q05957	
Q06060	
Q06147	GO:0017050 (D-erythro-sphingosine kinase)
Q06168	GO:0008094 (DNA-dependent ATPase)
Q06205	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
Q06504	GO:0004596 (peptide alpha-N-acetyltransferase)
Q06548	GO:0004674 (protein serine/threonine kinase)
Q06636	GO:0051377 (mannose-ethanolamine phosphotransferase)
Q07488	
Q07540	GO:0004322 (ferroxidase)
Q07800	GO:0004721 (phosphoprotein phosphatase)
Q07864	GO:0003887 (DNA-directed DNA polymerase)
Q07923	GO:0003955 (NAD(P)H dehydrogenase (quinone))
Q08162	GO:0000175 (3'-5'-exoribonuclease)
Q09028	GO:0008094 (DNA-dependent ATPase)
Q09131	GO:0003993 (acid phosphatase)
Q09154	GO:0008121 (ubiquinol-cytochrome-c reductase)
Q09173	GO:0004722 (protein serine/threonine phosphatase)
Q09177	GO:0003899 (DNA-directed RNA polymerase)
Q09191	GO:0003899 (DNA-directed RNA polymerase)
Q09923	GO:0050235 (pyridoxal 4-dehydrogenase)
Q0WL81	GO:0051731 (polynucleotide kinase)
Q0WP28	GO:0004656 (procollagen-proline 4-dioxygenase)
Q0WRJ7	GO:0016491 (oxidoreductase)
Q10361	GO:0009055 (electron carrier)

Q11136	GO:0008233 (peptidase)
Q12154	GO:0016887 (ATPase)
Q12311	GO:0004406 (H3/H4 histone acetyltransferase)
Q12380	GO:0019776 (Atg8 ligase)
Q12385	GO:0042171 (lysophosphatidic acid acyltransferase)
Q12508	GO:0004842 (ubiquitin-protein ligase)
Q12792	GO:0004713 (protein tyrosine kinase)
Q12830	GO:0008094 (DNA-dependent ATPase)
Q13216	GO:0008094 (DNA-dependent ATPase)
Q13356	GO:0004842 (ubiquitin-protein ligase)
Q13572	
Q13615	GO:0004725 (protein tyrosine phosphatase)
Q15005	
Q15386	GO:0004842 (ubiquitin-protein ligase)
Q15542	GO:0004402 (histone acetyltransferase)
Q16134	
Q16795	GO:0003954 (NADH dehydrogenase)
Q16974	
Q1ACB3	GO:0010357 (homogentisate solanesyltransferase)
Q1CSB4	
Q1CTA7	
Q1EC69	GO:0000254 (C-4 methylsterol oxidase)
Q1EDG4	
Q1H537	GO:0051744 (3,8-divinyl protochlorophyllide a 8-vinyl reductase)
Q1KSC5	
Q1PCS1	GO:0016175 (superoxide-generating NADPH oxidase)
Q1PID4	
Q1WIQ6	GO:0008886 (glyceraldehyde-3-phosphate dehydrogenase (NADP+))
Q24208	GO:0042054 (histone methyltransferase)
Q24368	GO:0008094 (DNA-dependent ATPase)
Q28653	
Q2TJA5	
Q2YGU0	
Q33DL3	
Q38854	GO:0008661 (1-deoxy-D-xylulose-5-phosphate synthase)
Q38869	GO:0004672 (protein kinase)
Q38879	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
Q38912	GO:0003924 (GTPase)
Q38929	GO:0004452 (isopentenyl-diphosphate delta-isomerase)
Q38945	GO:0008441 (3'(2'),5'-bisphosphate nucleotidase)
Q38971	
Q39023	
Q39024	GO:0004707 (MAP kinase)
Q39055	GO:0003824 (catalytic)
Q39102	
Q39152	GO:0080019 (fatty acyl-CoA reductase (alcohol-forming))
Q39227	GO:0008757 (S-adenosylmethionine-dependent methyltransferase)

Q39239	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
Q39241	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
Q39243	GO:0004791 (thioredoxin-disulfide reductase)
Q39619	
Q3E7T3	
Q3E840	GO:0009055 (electron carrier)
Q3EBA7	GO:0004839 (ubiquitin activating enzyme)
Q3EBG0	GO:0004788 (thiamin diphosphokinase)
Q3EDK8	GO:0009924 (octadecanal decarboxylase)
Q3LXA3	
Q3SYZ6	
Q3TDX8	GO:0004128 (cytochrome-b5 reductase)
Q3TIR0	GO:0008233 (peptidase)
Q3TN04	GO:0003899 (DNA-directed RNA polymerase)
Q3TWL1	GO:0008233 (peptidase)
Q3TY87	GO:0004334 (fumarylacetoacetase)
Q3U462	GO:0004568 (chitinase)
Q3U7E0	GO:0016887 (ATPase)
Q3UDY1	GO:0004032 (aldehyde reductase)
Q3UGH3	GO:0004559 (alpha-mannosidase)
Q3V335	GO:0004842 (ubiquitin-protein ligase)
Q40353	
Q40412	
Q40588	
Q40673	
Q40677	GO:0004332 (fructose-bisphosphate aldolase)
Q41376	
Q42472	GO:0004351 (glutamate decarboxylase)
Q42521	GO:0004351 (glutamate decarboxylase)
Q42524	GO:0016207 (4-coumarate-CoA ligase)
Q42525	GO:0008865 (fructokinase)
Q42527	GO:0004640 (phosphoribosylanthranilate isomerase)
Q42529	GO:0004834 (tryptophan synthase)
Q42533	GO:0003989 (acetyl-CoA carboxylase)
Q42536	
Q42541	GO:0004842 (ubiquitin-protein ligase)
Q42546	GO:0008441 (3'(2'),5'-bisphosphate nucleotidase)
Q42551	GO:0019789 (SUMO ligase)
Q42553	GO:0004452 (isopentenyl-diphosphate delta-isomerase)
Q42563	GO:0003999 (adenine phosphoribosyltransferase)
Q42569	
Q42606	GO:0004851 (uroporphyrin-III C-methyltransferase)
Q42880	
Q42896	
Q43077	
Q43125	GO:0004672 (protein kinase)
Q43157	GO:0004750 (ribulose-phosphate 3-epimerase)

Q43295	GO:0004020 (adenylylsulfate kinase)
Q43314	GO:0004353 (glutamate dehydrogenase [NAD(P)+])
Q43725	GO:0004124 (cysteine synthase)
Q43870	GO:0004781 (sulfate adenylyltransferase (ATP))
Q45QT1	
Q46851	
Q4AE87	
Q4G176	GO:0016878 (acid-thiol ligase)
Q4G338	
Q4KML2	GO:0003904 (deoxyribodipyrimidine photo-lyase)
Q4TU14	GO:0004842 (ubiquitin-protein ligase)
Q4VDN7	
Q504P4	GO:0042623 (ATPase activity, coupled)
Q52K88	GO:0016787 (hydrolase)
Q52T38	GO:0016417 (S-acyltransferase)
Q53E05	
Q545F0	GO:0050178 (phenylpyruvate tautomerase)
Q545L9	GO:0004719 (protein-L-isoaspartate (D-aspartate) O-methyltransferase)
Q564E2	GO:0004459 (L-lactate dehydrogenase)
Q564P2	
Q56WD9	GO:0003988 (acetyl-CoA C-acyltransferase)
Q56WN1	GO:0004356 (glutamate-ammonia ligase)
Q56Y11	GO:0045547 (dehydrodolichyl diphosphate synthase)
Q56YA5	GO:0050281 (serine-glyoxylate transaminase)
Q56YN3	GO:0042736 (NADH kinase)
Q56YU0	GO:0050269 (coniferyl-aldehyde dehydrogenase)
Q56ZN6	GO:0009678 (hydrogen-translocating pyrophosphatase)
Q571L5	GO:0042054 (histone methyltransferase)
Q596C5	
Q596W8	
Q596W9	
Q598P5	
Q59H18	GO:0004672 (protein kinase)
Q5CCT8	
Q5DKU8	
Q5I1Y5	GO:0042623 (ATPase activity, coupled)
Q5IBM5	GO:0004842 (ubiquitin-protein ligase)
Q5ICC1	
Q5KTR2	
Q5M731	GO:0008972 (phosphomethylpyrimidine kinase)
Q5M969	GO:0050124 (N-acylneuraminate-9-phosphatase)
Q5NUF4	
Q5SGD2	
Q5U3Z7	GO:0008732 (L-allo-threonine aldolase)
Q5W7F1	GO:0017040 (ceramidase)
Q5XF85	GO:0004842 (ubiquitin-protein ligase)
Q5XIF3	GO:0008137 (NADH dehydrogenase (ubiquinone))
Q5YDB6	GO:0019204 (nucleotide phosphatase)
Q5YFA2	

Q60720	GO:0000293 (ferric-chelate reductase)
Q61074	GO:0004721 (phosphoprotein phosphatase)
Q64620	GO:0004722 (protein serine/threonine phosphatase)
Q64654	GO:0008398 (sterol 14-demethylase)
Q65CJ7	
Q66GP9	GO:0004517 (nitric-oxide synthase)
Q66GT5	GO:0004439 (phosphatidylinositol-4,5-bisphosphate 5-phosphatase)
Q66Q58	
Q67C39	
Q67ZE1	GO:0047012 (sterol-4-alpha-carboxylate 3-dehydrogenase (decarboxylating))
Q680Q4	GO:0019789 (SUMO ligase)
Q6DGG0	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
Q6DNI8	
Q6EMC1	
Q6H9K0	GO:0047911 (galacturan 1,4-alpha-galacturonidase)
Q6IVK8	
Q6IVV3	
Q6L619	
Q6L8K4	
Q6NLQ6	GO:0004698 (calcium-dependent protein kinase C)
Q6PD26	GO:0003923 (GPI-anchor transamidase)
Q6PLH8	
Q6PTT0	
Q6Q0C0	GO:0004842 (ubiquitin-protein ligase)
Q6Q796	
Q6RFY4	
Q6SJP5	
Q6T5D1	
Q6TGX5	GO:0004842 (ubiquitin-protein ligase)
Q6TPH1	GO:0003993 (acid phosphatase)
Q6U5H3	
Q6VNB8	GO:0003831 (beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase)
Q6WNR0	
Q6XQN6	GO:0004516 (nicotinate phosphoribosyltransferase)
Q6XZ79	
Q6Z744	
Q6ZFH6	
Q6ZY51	GO:0051752 (phosphoglucan, water dikinase)
Q70EK8	GO:0004221 (ubiquitin thiolesterase)
Q70G33	
Q71DJ5	GO:0047714 (galactolipase)
Q71SH3	
Q724I0	GO:0016887 (ATPase)
Q75PR2	
Q75W54	
Q764C1	
Q76E52	

Q76FS5	GO:0050347 (trans-octaprenyltranstransferase)
Q78J03	GO:0000318 (protein-methionine-R-oxide reductase)
Q7KLV9	GO:0004175 (endopeptidase)
Q7KMP8	GO:0004175 (endopeptidase)
Q7KVA1	GO:0030158 (protein xylosyltransferase)
Q7L1T6	GO:0016653 (oxidoreductase activity, acting on NADH or NADPH, heme protein as acceptor)
Q7SXX1	GO:0004372 (glycine hydroxymethyltransferase)
Q7WTU5	
Q7X9A9	
Q7X9G0	
Q7X9J0	
Q7X9V3	GO:0008080 (N-acetyltransferase)
Q7XA48	
Q7XJ65	
Q7XJE6	GO:0004197 (cysteine-type endopeptidase)
Q7XJR6	
Q7XTK4	
Q7XZQ7	
Q7Y232	GO:0035251 (UDP-glucosyltransferase)
Q7Z419	GO:0004842 (ubiquitin-protein ligase)
Q7Z569	GO:0004842 (ubiquitin-protein ligase)
Q804C3	GO:0004738 (pyruvate dehydrogenase)
Q83066	
Q840T2	
Q84FG5	
Q84JH7	GO:0051266 (sirohydrochlorin ferrochelataze)
Q84JN3	GO:0003899 (DNA-directed RNA polymerase)
Q84JU4	GO:0033549 (MAP kinase phosphatase)
Q84LE3	
Q84LH3	GO:0008408 (3'-5' exonuclease)
Q84LM4	
Q84MD8	GO:0008531 (riboflavin kinase)
Q84P23	GO:0004321 (fatty-acyl-CoA synthase)
Q84UH6	
Q84V83	
Q84VW9	GO:0008964 (phosphoenolpyruvate carboxylase)
Q84WL2	GO:0047627 (adenylylsulfatase)
Q84WS0	GO:0004252 (serine-type endopeptidase)
Q84XU2	GO:0004721 (phosphoprotein phosphatase)
Q84Y95	GO:0015038 (glutathione disulfide oxidoreductase)
Q84ZT8	
Q84ZW8	
Q852S9	
Q852T2	
Q86RB1	
Q86TM6	GO:0016881 (acid-amino acid ligase)
Q86U44	GO:0016422 (mRNA (2'-O-methyladenosine-N6-)-methyltransferase)
Q86VF5	

Q8BGM2	GO:0004349 (glutamate 5-kinase)
Q8BPT6	GO:0008233 (peptidase)
Q8BTY5	GO:0008233 (peptidase)
Q8CHB9	GO:0003831 (beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase)
Q8GSJ1	GO:0003879 (ATP phosphoribosyltransferase)
Q8GTB6	
Q8GUQ8	GO:0004854 (xanthine dehydrogenase)
Q8GV29	
Q8GVD7	
Q8GVE8	GO:0008964 (phosphoenolpyruvate carboxylase)
Q8GW72	GO:0004560 (alpha-L-fucosidase)
Q8GWP5	GO:0008835 (diaminohydroxyphosphoribosylaminopyrimidine deaminase)
Q8GWT4	GO:0008276 (protein methyltransferase)
Q8GXU8	GO:0003841 (1-acylglycerol-3-phosphate O-acyltransferase)
Q8GXX3	GO:0016682 (oxidoreductase activity, acting on diphenols and related substances as donors, oxygen as acceptor)
Q8GY23	GO:0004842 (ubiquitin-protein ligase)
Q8GY31	GO:0030611 (arsenate reductase)
Q8GY89	GO:0016667 (oxidoreductase activity, acting on sulfur group of donors)
Q8GYW7	
Q8GZ86	
Q8GZQ4	GO:0004521 (endoribonuclease)
Q8GZS9	
Q8H0F2	
Q8H0L8	
Q8H0P5	
Q8H0P6	
Q8H0W1	GO:0008233 (peptidase)
Q8H136	GO:0016887 (ATPase)
Q8H183	GO:0003837 (beta-ureidopropionase)
Q8H191	GO:0046592 (polyamine oxidase)
Q8IR38	GO:0004407 (histone deacetylase)
Q8IRW8	GO:0042800 (histone lysine N-methyltransferase activity (H3-K4 specific))
Q8IUH5	GO:0019706 (protein-cysteine S-palmitoleyltransferase)
Q8IV48	GO:0008408 (3'-5' exonuclease)
Q8IVS2	GO:0016740 (transferase)
Q8JHE0	GO:0004672 (protein kinase)
Q8K3A2	GO:0008665 (2'-phosphotransferase)
Q8KDI7	
Q8KTI8	
Q8L3U4	GO:0008967 (phosphoglycolate phosphatase)
Q8L493	GO:0008696 (4-amino-4-deoxychorismate lyase)
Q8L4H0	GO:0004672 (protein kinase)
Q8L5E1	
Q8L5Y9	GO:0004594 (pantothenate kinase)
Q8L633	GO:0042781 (3'-tRNA processing endoribonuclease)
Q8L649	GO:0004842 (ubiquitin-protein ligase)
Q8L6Y1	GO:0004843 (ubiquitin-specific protease)

Q8L7F9	GO:0010488 (UDP-galactose:N-glycan beta-1,3-galactosyltransferase)
Q8L7R2	GO:0004413 (homoserine kinase)
Q8L9C4	GO:0045703 (ketoreductase)
Q8L9W3	GO:0004842 (ubiquitin-protein ligase)
Q8LA53	GO:0051747 (DNA demethylase)
Q8LAS8	GO:0018738 (S-formylglutathione hydrolase)
Q8LBA6	GO:0003881 (CDP-diacylglycerol-inositol 3-phosphatidyltransferase)
Q8LCE1	GO:0004356 (glutamate-ammonia ligase)
Q8LCT3	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
Q8LDP4	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
Q8LDU4	GO:0051743 (red chlorophyll catabolite reductase)
Q8LFP9	GO:0016860 (intramolecular oxidoreductase)
Q8LG50	GO:0003841 (1-acylglycerol-3-phosphate O-acyltransferase)
Q8LK04	
Q8LK56	GO:0019104 (DNA N-glycosylase)
Q8LKF6	
Q8LKS7	
Q8LSZ3	
Q8MPM5	
Q8MPP3	GO:0004222 (metalloendopeptidase)
Q8QGQ2	GO:0004028 (3-chloroallyl aldehyde dehydrogenase)
Q8R0N9	GO:0016409 (palmitoyltransferase)
Q8R431	GO:0016787 (hydrolase)
Q8R516	GO:0004842 (ubiquitin-protein ligase)
Q8RU27	
Q8RUX2	
Q8RW99	
Q8RWE2	GO:0004805 (trehalose-phosphatase)
Q8RWE8	GO:0010475 (galactose-1-phosphate guanylyltransferase (GDP))
Q8RWF1	GO:0030267 (glyoxylate reductase (NADP))
Q8RWM1	GO:0004161 (dimethylallyltranstransferase)
Q8RWT5	GO:0003937 (IMP cyclohydrolase)
Q8RWV4	GO:0009974 (epsilon hydroxylase)
Q8RWW0	GO:0016301 (kinase)
Q8RWZ3	GO:0003995 (acyl-CoA dehydrogenase)
Q8RX88	GO:0004175 (endopeptidase)
Q8RXD4	GO:0004842 (ubiquitin-protein ligase)
Q8RXU4	GO:0004793 (threonine aldolase)
Q8RXV3	GO:0004722 (protein serine/threonine phosphatase)
Q8RY79	
Q8S4R4	
Q8S5C1	
Q8S5C2	
Q8S8F9	GO:0008936 (nicotinamidase)
Q8S948	GO:0050347 (trans-octaprenyltranstransferase)
Q8SYG2	GO:0019781 (NEDD8 activating enzyme)
Q8T0N8	
Q8TC12	

Q8UWM8	
Q8VDP3	GO:0004497 (monooxygenase)
Q8VWE9	
Q8VWG7	GO:0016671 (oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor)
Q8VWH7	
Q8VWJ1	GO:0010176 (homogentisate phytyltransferase)
Q8VWN6	
Q8VYF5	GO:0050126 (N-carbamoylputrescine amidase)
Q8VYI1	GO:0000170 (sphingosine hydroxylase)
Q8VYI4	GO:0004073 (aspartate-semialdehyde dehydrogenase)
Q8VYJ1	GO:0008756 (o-succinylbenzoate-CoA ligase)
Q8VYS2	
Q8VYU3	
Q8VZ17	GO:0008168 (methyltransferase)
Q8VZB2	GO:0004300 (enoyl-CoA hydratase)
Q8VZC3	GO:0003842 (1-pyrroline-5-carboxylate dehydrogenase)
Q8VZD4	GO:0004175 (endopeptidase)
Q8VZF1	GO:0003987 (acetate-CoA ligase)
Q8VZH2	GO:0004177 (aminopeptidase)
Q8VZU3	GO:0016752 (sinapoyltransferase)
Q8VZW3	
Q8W1A0	
Q8W1L6	GO:0018812 (3-hydroxyacyl-CoA dehydratase)
Q8W1S1	GO:0046481 (digalactosyldiacylglycerol synthase)
Q8W1W9	
Q8W2B8	GO:0009001 (serine O-acetyltransferase)
Q8W2K4	
Q8W468	GO:0004842 (ubiquitin-protein ligase)
Q8W471	GO:0008922 (long-chain-fatty-acid-[acyl-carrier-protein] ligase)
Q8W4C7	GO:0019148 (D-cysteine desulhydrase)
Q8W4K6	GO:0003924 (GTPase)
Q8W4P1	GO:0016301 (kinase)
Q8W595	GO:0018024 (histone-lysine N-methyltransferase)
Q8W5A1	
Q8W5S1	GO:0004672 (protein kinase)
Q8YC53	
Q90YZ9	
Q91W40	GO:0008808 (cardiolipin synthase)
Q91WU6	GO:0016409 (palmitoyltransferase)
Q91YM8	GO:0004748 (ribonucleoside-diphosphate reductase)
Q91YR1	GO:0004713 (protein tyrosine kinase)
Q920R6	GO:0008553 (hydrogen-exporting ATPase activity, phosphorylative mechanism)
Q921A4	GO:0004601 (peroxidase)
Q92355	GO:0043141 (ATP-dependent 5'-3' DNA helicase)
Q92466	GO:0004842 (ubiquitin-protein ligase)
Q924Z4	GO:0050291 (sphingosine N-acyltransferase)
Q93009	GO:0004843 (ubiquitin-specific protease)

Q93KB8	
Q93V61	
Q93V78	
Q93VR3	GO:0047918 (GDP-mannose 3,5-epimerase)
Q93X45	
Q93X74	
Q93Y23	GO:0004499 (flavin-containing monooxygenase)
Q93YN9	GO:0035299 (inositol pentakisphosphate 2-kinase)
Q93YP7	GO:0047293 (4-hydroxybenzoate nonaprenyltransferase)
Q93YW7	GO:0008808 (cardiolipin synthase)
Q93ZG7	GO:0008186 (RNA-dependent ATPase)
Q93ZK8	
Q93ZN9	GO:0010285 (L,L-diaminopimelate aminotransferase)
Q93ZY3	
Q940D4	GO:0004558 (alpha-glucosidase)
Q940M2	GO:0008453 (alanine-glyoxylate transaminase)
Q941L0	GO:0016759 (cellulose synthase)
Q948R1	GO:0008970 (phospholipase A1)
Q948S7	
Q949Q0	GO:0004367 (glycerol-3-phosphate dehydrogenase (NAD+))
Q949X0	GO:0009979 (16:0 monogalactosyldiacylglycerol desaturase)
Q949X7	GO:0008836 (diaminopimelate decarboxylase)
Q949Y0	GO:0004843 (ubiquitin-specific protease)
Q94A41	GO:0004556 (alpha-amylase)
Q94A72	
Q94AA4	GO:0003872 (6-phosphofructokinase)
Q94AA9	GO:0035252 (UDP-xylosyltransferase)
Q94AG2	GO:0004675 (transmembrane receptor protein serine/threonine kinase)
Q94AS5	GO:0010296 (prenylcysteine methylesterase)
Q94B07	
Q94B35	GO:0051745 (4-hydroxy-3-methylbut-2-en-1-yl diphosphate reductase)
Q94B74	GO:0047631 (ADP-ribose diphosphatase)
Q94BN2	GO:0016768 (spermine synthase)
Q94BT0	GO:0046524 (sucrose-phosphate synthase)
Q94F47	GO:0004842 (ubiquitin-protein ligase)
Q94FM7	
Q94FS6	
Q94IG7	GO:0004729 (protoporphyrinogen oxidase)
Q95AJ2	
Q95TI4	GO:0004842 (ubiquitin-protein ligase)
Q96266	GO:0004364 (glutathione transferase)
Q96329	GO:0003997 (acyl-CoA oxidase)
Q96330	GO:0045431 (flavonol synthase)
Q963A7	
Q96529	GO:0004019 (adenylosuccinate synthase)
Q96533	GO:0080007 (S-nitrosoglutathione reductase)
Q96551	
Q96DB2	GO:0004407 (histone deacetylase)
Q96EQ9	GO:0042800 (histone lysine N-methyltransferase activity (H3-K4 specific))

Q96HE7	GO:0016491 (oxidoreductase)
Q96LZ3	
Q96PM5	
Q96Q15	GO:0004674 (protein serine/threonine kinase)
Q96Q89	GO:0016887 (ATPase)
Q99973	GO:0003720 (telomerase)
Q99LX0	GO:0051920 (peroxiredoxin)
Q99MD6	GO:0004791 (thioredoxin-disulfide reductase)
Q99MN9	
Q99NA5	GO:0004449 (isocitrate dehydrogenase (NAD+))
Q99P30	GO:0003986 (acetyl-CoA hydrolase)
Q9AR19	GO:0010484 (H3 histone acetyltransferase)
Q9AR73	
Q9AR92	
Q9ATG8	
Q9AV98	
Q9AVE7	GO:0009540 (zeaxanthin epoxidase)
Q9BRQ8	GO:0004174 (electron-transferring-flavoprotein dehydrogenase)
Q9BT22	
Q9BTU6	GO:0004430 (1-phosphatidylinositol 4-kinase)
Q9BU89	GO:0019135 (deoxyhypusine monooxygenase)
Q9BUQ8	GO:0008026 (ATP-dependent helicase)
Q9BV10	
Q9BV57	GO:0016491 (oxidoreductase)
Q9BVA0	GO:0008568 (microtubule-severing ATPase)
Q9BZC7	GO:0016887 (ATPase)
Q9BZE4	GO:0003924 (GTPase)
Q9C5I1	GO:0047350 (glucuronate-1-phosphate uridylyltransferase)
Q9C5J7	GO:0003872 (6-phosphofructokinase)
Q9C5J9	GO:0003924 (GTPase)
Q9C5L2	GO:0004143 (diacylglycerol kinase)
Q9C5Q8	GO:0008173 (RNA methyltransferase)
Q9C5R8	GO:0051920 (peroxiredoxin)
Q9C5U1	GO:0004673 (protein histidine kinase)
Q9C5W3	GO:0003951 (NAD+ kinase)
Q9C5Y0	GO:0004630 (phospholipase D)
Q9C7G1	GO:0004842 (ubiquitin-protein ligase)
Q9C7R6	GO:0004842 (ubiquitin-protein ligase)
Q9C867	GO:0016301 (kinase)
Q9C8G9	GO:0008559 (xenobiotic-transporting ATPase)
Q9C920	
Q9C9C0	GO:0004252 (serine-type endopeptidase)
Q9C9D0	
Q9C9G4	GO:0043765 (T/G mismatch-specific endonuclease)
Q9C9Q8	GO:0008168 (methyltransferase)
Q9C9S4	GO:0004805 (trehalose-phosphatase)
Q9CA67	GO:0045550 (geranylgeranyl reductase)
Q9CAF5	GO:0042626 (ATPase activity, coupled to transmembrane movement of substances)

Q9CAQ2	GO:0004406 (H3/H4 histone acetyltransferase)
Q9CAV6	GO:0004672 (protein kinase)
Q9CB01	GO:0003924 (GTPase)
Q9CR50	
Q9CYR6	GO:0004614 (phosphoglucomutase)
Q9CZL5	GO:0004505 (phenylalanine 4-monooxygenase)
Q9D074	GO:0004842 (ubiquitin-protein ligase)
Q9D892	GO:0047429 (nucleoside-triphosphate diphosphatase)
Q9DB28	GO:0004526 (ribonuclease P)
Q9DGH5	GO:0042083 (5,10-methylenetetrahydrofolate-dependent methyltransferase)
Q9EQY6	GO:0000030 (mannosyltransferase)
Q9EV64	
Q9FAF8	
Q9FEW9	
Q9FEY5	
Q9FEY7	
Q9FF66	GO:0004842 (ubiquitin-protein ligase)
Q9FFN7	GO:0004143 (diacylglycerol kinase)
Q9FG87	GO:0009922 (fatty acid elongase)
Q9FGC7	GO:0009540 (zeaxanthin epoxidase)
Q9FGX1	GO:0003878 (ATP citrate synthase)
Q9FH02	GO:0016887 (ATPase)
Q9FHT5	GO:0047196 (long-chain-alcohol O-fatty-acyltransferase)
Q9FHX5	GO:0042973 (glucan endo-1,3-beta-D-glucosidase)
Q9FI56	GO:0004176 (ATP-dependent peptidase)
Q9FI61	GO:0004842 (ubiquitin-protein ligase)
Q9FI78	GO:0047205 (quinic O-hydroxycinnamoyltransferase)
Q9FIE8	GO:0048040 (UDP-glucuronate decarboxylase)
Q9FJ79	GO:0003917 (DNA topoisomerase type I)
Q9FJM5	GO:0004049 (anthranilate synthase)
Q9FJP6	GO:0004842 (ubiquitin-protein ligase)
Q9FK25	GO:0047763 (caffeate O-methyltransferase)
Q9FK51	GO:0017103 (UTP:galactose-1-phosphate uridylyltransferase)
Q9FKG3	GO:0003872 (6-phosphofructokinase)
Q9FKS0	GO:0004849 (uridine kinase)
Q9FKW6	GO:0003959 (NADPH dehydrogenase)
Q9FLN0	GO:0016298 (lipase)
Q9FLP9	GO:0010475 (galactose-1-phosphate guanylyltransferase (GDP))
Q9FLT2	GO:0004428 (inositol or phosphatidylinositol kinase)
Q9FLW9	GO:0004743 (pyruvate kinase)
Q9FMJ0	GO:0004430 (1-phosphatidylinositol 4-kinase)
Q9FMP3	
Q9FMW9	GO:0010340 (carboxyl-O-methyltransferase)
Q9FMX7	GO:0008936 (nicotinamidase)
Q9FN05	GO:0015926 (glucosidase)
Q9FNA9	
Q9FNY7	GO:0008534 (oxidized purine base lesion DNA N-glycosylase)
Q9FPE3	GO:0004392 (heme oxygenase (decyclizing))

Q9FPS9	GO:0004843 (ubiquitin-specific protease)
Q9FSD6	
Q9FSW1	
Q9FT83	
Q9FUB7	GO:0016210 (naringenin-chalcone synthase)
Q9FUC2	
Q9FUP0	GO:0016629 (12-oxophytodienoate reductase)
Q9FV53	GO:0042586 (peptide deformylase)
Q9FVQ6	GO:0010283 (pinorexinol reductase)
Q9FX32	GO:0016157 (sucrose synthase)
Q9FX43	GO:0004708 (MAP kinase kinase)
Q9FY48	GO:0004842 (ubiquitin-protein ligase)
Q9FYB3	GO:0004672 (protein kinase)
Q9FYC2	GO:0032441 (pheophorbide a oxygenase)
Q9FZ48	GO:0004842 (ubiquitin-protein ligase)
Q9GU36	
Q9H0N0	GO:0003924 (GTPase)
Q9H611	GO:0043141 (ATP-dependent 5'-3' DNA helicase)
Q9HB23	GO:0004824 (lysine-tRNA ligase)
Q9HBH5	
Q9HCG7	GO:0008422 (beta-glucosidase)
Q9JMF7	GO:0047874 (dolichyldiphosphatase)
Q9LAE5	
Q9LCZ4	
Q9LDA9	GO:0031202 (RNA splicing factor activity, transesterification mechanism)
Q9LDC0	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
Q9LDI3	GO:0004672 (protein kinase)
Q9LDU6	GO:0009918 (sterol delta7 reductase)
Q9LE59	GO:0047262 (polygalacturonate 4-alpha-galacturonosyltransferase)
Q9LEH3	GO:0004601 (peroxidase)
Q9LEJ0	
Q9LET6	GO:0080019 (fatty acyl-CoA reductase (alcohol-forming))
Q9LEW8	GO:0016301 (kinase)
Q9LFA2	GO:0004672 (protein kinase)
Q9LFF9	GO:0004427 (inorganic diphosphatase)
Q9LFG2	GO:0008837 (diaminopimelate epimerase)
Q9LFR0	GO:0004559 (alpha-mannosidase)
Q9LFT8	GO:0016301 (kinase)
Q9LIB2	GO:0004645 (phosphorylase)
Q9LIK0	GO:0004743 (pyruvate kinase)
Q9LIS3	
Q9LJB4	GO:0050736 (O-malonyltransferase)
Q9LJK1	
Q9LJL3	GO:0004222 (metalloendopeptidase)
Q9LK23	GO:0004345 (glucose-6-phosphate dehydrogenase)
Q9LK64	GO:0042626 (ATPase activity, coupled to transmembrane movement of substances)
Q9LKF8	
Q9LKJ1	GO:0003860 (3-hydroxyisobutyryl-CoA hydrolase)

Q9LL84	GO:0003910 (DNA ligase (ATP))
Q9LMI0	GO:0004805 (trehalose-phosphatase)
Q9LMT2	
Q9LQ04	GO:0008831 (dTDP-4-dehydrorhamnose reductase)
Q9LQF2	GO:0004564 (beta-fructofuranosidase)
Q9LR75	GO:0004109 (coproporphyrinogen oxidase)
Q9LR78	GO:0004722 (protein serine/threonine phosphatase)
Q9LRB0	GO:0017050 (D-erythro-sphingosine kinase)
Q9LRC8	
Q9LRR9	GO:0008891 (glycolate oxidase)
Q9LS14	GO:0004842 (ubiquitin-protein ligase)
Q9LSP7	GO:0004842 (ubiquitin-protein ligase)
Q9LSQ5	GO:0016655 (oxidoreductase activity, acting on NADH or NADPH, quinone or similar compound as acceptor)
Q9LSS7	GO:0019784 (NEDD8-specific protease)
Q9LSZ9	GO:0004758 (serine C-palmitoyltransferase)
Q9LT02	GO:0019829 (cation-transporting ATPase)
Q9LT10	GO:0004091 (carboxylesterase)
Q9LTR9	GO:0019107 (myristoyltransferase)
Q9LTX3	GO:0004733 (pyridoxamine-phosphate oxidase)
Q9LU41	GO:0005388 (calcium-transporting ATPase)
Q9LU86	GO:0051920 (peroxiredoxin)
Q9LUF3	GO:0019948 (SUMO activating enzyme)
Q9LUL7	GO:0030599 (pectinesterase)
Q9LV03	GO:0016040 (glutamate synthase (NADH))
Q9LVB8	GO:0004091 (carboxylesterase)
Q9LW56	GO:0046577 (long-chain-alcohol oxidase)
Q9LX33	GO:0008318 (protein prenyltransferase)
Q9LX93	GO:0004842 (ubiquitin-protein ligase)
Q9LXC9	GO:0004427 (inorganic diphosphatase)
Q9LXE5	GO:0003886 (DNA (cytosine-5-)-methyltransferase)
Q9LY74	GO:0051741 (2-methyl-6-phytyl-1,4-benzoquinone methyltransferase)
Q9LY87	GO:0004842 (ubiquitin-protein ligase)
Q9LZ66	GO:0016002 (sulfite reductase)
Q9LZ76	GO:0010276 (phytol kinase)
Q9LZJ3	GO:0035252 (UDP-xylosyltransferase)
Q9LZV4	GO:0004672 (protein kinase)
Q9M099	GO:0004185 (serine-type carboxypeptidase)
Q9M0V0	
Q9M0X9	GO:0004321 (fatty-acyl-CoA synthase)
Q9M156	GO:0035251 (UDP-glucosyltransferase)
Q9M1W4	GO:0008898 (homocysteine S-methyltransferase)
Q9M209	GO:0000175 (3'-5'-exoribonuclease)
Q9M2E2	GO:0047504 ((-)-menthol dehydrogenase)
Q9M2U2	GO:0019166 (trans-2-enoyl-CoA reductase (NADPH))
Q9M3W5	
Q9M591	GO:0048529 (magnesium-protoporphyrin IX monomethyl ester (oxidative) cyclase)
Q9M5J0	

Q9M643	GO:0047793 (cycloeucaleanol cycloisomerase)
Q9M7I7	GO:0047746 (chlorophyllase)
Q9M7L9	
Q9M7T0	GO:0004601 (peroxidase)
Q9M8K7	GO:0033549 (MAP kinase phosphatase)
Q9M8L4	GO:0004370 (glycerol kinase)
Q9M8S8	GO:0010347 (L-galactose-1-phosphate phosphatase)
Q9MA43	GO:0042800 (histone lysine N-methyltransferase activity (H3-K4 specific))
Q9MAT5	GO:0035242 (protein-arginine omega-N asymmetric methyltransferase)
Q9MB58	GO:0004331 (fructose-2,6-bisphosphate 2-phosphatase)
Q9MBA1	GO:0010277 (chlorophyllide a oxygenase)
Q9N0A4	
Q9NB32	
Q9NDA2	
Q9NDA3	
Q9NHC6	
Q9NPC4	GO:0008378 (galactosyltransferase)
Q9NT62	GO:0019787 (small conjugating protein ligase)
Q9NUT2	
Q9NY43	
Q9P289	GO:0004672 (protein kinase)
Q9P2X0	GO:0004582 (dolichyl-phosphate beta-D-mannosyltransferase)
Q9P9M8	
Q9QUL6	GO:0016887 (ATPase)
Q9QYF1	
Q9RAE4	
Q9RAT0	
Q9RFL1	
Q9RFQ7	
Q9S3U5	
Q9S702	GO:0004072 (aspartate kinase)
Q9S762	GO:0003879 (ATP phosphoribosyltransferase)
Q9S7B5	GO:0004795 (threonine synthase)
Q9S7D1	GO:0046480 (galactolipid galactosyltransferase)
Q9S7E9	
Q9S7U9	GO:0004708 (MAP kinase kinase)
Q9S816	GO:0004629 (phospholipase C)
Q9S818	GO:0045486 (naringenin 3-dioxygenase)
Q9S850	GO:0008482 (sulfite oxidase)
Q9S9Q6	GO:0004519 (endonuclease)
Q9SA18	GO:0004412 (homoserine dehydrogenase)
Q9SA77	GO:0050373 (UDP-arabinose 4-epimerase)
Q9SAA1	GO:0045547 (dehydrodolichyl diphosphate synthase)
Q9SAK4	GO:0004777 (succinate-semialdehyde dehydrogenase)
Q9SB57	
Q9SBA5	GO:0004428 (inositol or phosphatidylinositol kinase)
Q9SBJ1	GO:0009927 (histidine phosphotransfer kinase)
Q9SC14	
Q9SCY0	GO:0004614 (phosphoglucomutase)

Q9SCZ4	GO:0004672 (protein kinase)
Q9SD85	GO:0016711 (flavonoid 3'-monooxygenase)
Q9SDS7	GO:0046961 (hydrogen ion transporting ATPase activity, rotational mechanism)
Q9SDY5	GO:0019787 (small conjugating protein ligase)
Q9SEE5	GO:0004335 (galactokinase)
Q9SEI3	GO:0016887 (ATPase)
Q9SEI4	GO:0016887 (ATPase)
Q9SEX2	
Q9SGD6	GO:0047769 (arogenate dehydratase)
Q9SGY2	GO:0003878 (ATP citrate synthase)
Q9SHH8	GO:0004364 (glutathione transferase)
Q9SHI7	GO:0004842 (ubiquitin-protein ligase)
Q9SI64	
Q9SJ44	GO:0004842 (ubiquitin-protein ligase)
Q9SJE2	GO:0016297 (acyl-[acyl-carrier-protein] hydrolase)
Q9SJF3	GO:0050072 (m7G(5')pppN diphosphatase)
Q9SK82	
Q9SL05	GO:0009055 (electron carrier)
Q9SL42	GO:0003755 (peptidyl-prolyl cis-trans isomerase)
Q9SL79	GO:0031202 (RNA splicing factor activity, transesterification mechanism)
Q9SLA8	GO:0016631 (enoyl-[acyl-carrier-protein] reductase)
Q9SLC3	GO:0004842 (ubiquitin-protein ligase)
Q9SMB7	
Q9SMC1	
Q9SMG6	
Q9SMN0	GO:0004091 (carboxylesterase)
Q9SMW0	GO:0016161 (beta-amylase)
Q9SN27	GO:0004842 (ubiquitin-protein ligase)
Q9SNC6	GO:0004842 (ubiquitin-protein ligase)
Q9SP05	
Q9SP20	
Q9SPD6	GO:0004784 (superoxide dismutase)
Q9SQI8	GO:0004742 (dihydrolipoyllysine-residue acetyltransferase)
Q9SQJ1	
Q9SR43	GO:0050619 (phytochromobilin:ferredoxin oxidoreductase)
Q9SR52	GO:0009039 (urease)
Q9SR96	GO:0016491 (oxidoreductase)
Q9SRQ7	GO:0004629 (phospholipase C)
Q9SRS9	GO:0004842 (ubiquitin-protein ligase)
Q9SRW9	GO:0047517 (1,4-beta-D-xylan synthase)
Q9SS45	
Q9SSB5	GO:0016887 (ATPase)
Q9SSE7	GO:0047769 (arogenate dehydratase)
Q9ST03	
Q9STG9	GO:0004044 (amidophosphoribosyltransferase)
Q9SU38	
Q9SU56	GO:0016633 (galactonolactone dehydrogenase)
Q9SUM3	GO:0003958 (NADPH-hemoprotein reductase)

Q9SVC6	GO:0004842 (ubiquitin-protein ligase)
Q9SW18	GO:0046406 (magnesium protoporphyrin IX methyltransferase)
Q9SWE5	GO:0004633 (phosphopantothencysteine decarboxylase)
Q9SXP7	GO:0017118 (lipoyltransferase)
Q9SY73	GO:0016616 (oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor)
Q9SYM7	
Q9SYQ8	
Q9SYT0	GO:0004601 (peroxidase)
Q9SZ30	GO:0000107 (imidazoleglycerol-phosphate synthase)
Q9SZC9	
Q9SZZ8	GO:0010291 (carotene beta-ring hydroxylase)
Q9TV77	
Q9U794	
Q9UBP6	GO:0008176 (tRNA (guanine-N7-)-methyltransferase)
Q9UBQ7	GO:0030267 (glyoxylate reductase (NADP))
Q9UGM6	
Q9UHB4	GO:0016491 (oxidoreductase)
Q9UHY7	GO:0043874 (acireductone synthase)
Q9UJ83	GO:0016830 (carbon-carbon lyase)
Q9UKM7	
Q9UMS4	GO:0004842 (ubiquitin-protein ligase)
Q9US25	GO:0008094 (DNA-dependent ATPase)
Q9UT74	GO:0004409 (homoaconitate hydratase)
Q9UTN3	GO:0004652 (polynucleotide adenyltransferase)
Q9V345	GO:0019781 (NEDD8 activating enzyme)
Q9V3P6	GO:0004175 (endopeptidase)
Q9V3Z4	GO:0004175 (endopeptidase)
Q9V429	GO:0015036 (disulfide oxidoreductase)
Q9V436	GO:0004175 (endopeptidase)
Q9V6G5	GO:0032577 (phosphatidylcholine:cardiolipin O-linoleoyltransferase)
Q9V9X8	GO:0004686 (elongation factor-2 kinase)
Q9VCU9	GO:0016443 (bidentate ribonuclease III)
Q9VCY3	GO:0019781 (NEDD8 activating enzyme)
Q9VH19	GO:0008233 (peptidase)
Q9VHP0	GO:0004004 (ATP-dependent RNA helicase)
Q9VMJ5	GO:0004565 (beta-galactosidase)
Q9VMQ9	
Q9VT65	GO:0004198 (calcium-dependent cysteine-type endopeptidase)
Q9VUX3	GO:0019213 (deacetylase)
Q9VUX9	GO:0008233 (peptidase)
Q9VVU5	GO:0019781 (NEDD8 activating enzyme)
Q9VW54	GO:0004175 (endopeptidase)
Q9VZQ8	GO:0004601 (peroxidase)
Q9W1B0	GO:0004674 (protein serine/threonine kinase)
Q9W5E1	GO:0004842 (ubiquitin-protein ligase)
Q9X0Y1	
Q9XES5	
Q9XFS9	GO:0030604 (1-deoxy-D-xylulose-5-phosphate reductoisomerase)

Q9XGN4	
Q9XHE8	
Q9XI46	GO:0016491 (oxidoreductase)
Q9XI60	GO:0008195 (phosphatidate phosphatase)
Q9XIA9	GO:0004467 (long-chain-fatty-acid-CoA ligase)
Q9XIL5	GO:0031202 (RNA splicing factor activity, transesterification mechanism)
Q9XZG5	
Q9Y230	GO:0016887 (ATPase)
Q9Y259	
Q9Y265	GO:0016887 (ATPase)
Q9Y285	
Q9Y535	GO:0003899 (DNA-directed RNA polymerase)
Q9Y7R4	GO:0018024 (histone-lysine N-methyltransferase)
Q9Z172	GO:0019789 (SUMO ligase)
Q9ZNV9	GO:0009927 (histidine phosphotransfer kinase)
Q9ZP06	GO:0016615 (malate dehydrogenase)
Q9ZPN0	
Q9ZPQ3	GO:0051499 (D-aminoacyl-tRNA deacylase)
Q9ZPV8	GO:0004595 (pantetheine-phosphate adenylyltransferase)
Q9ZQ31	GO:0004713 (protein tyrosine kinase)
Q9ZQ95	GO:0035251 (UDP-glucosyltransferase)
Q9ZQC6	GO:0042285 (xylosyltransferase)
Q9ZS21	
Q9ZS97	GO:0042626 (ATPase activity, coupled to transmembrane movement of substances)
Q9ZSP7	
Q9ZSS6	GO:0004794 (L-threonine ammonia-lyase)
Q9ZT48	GO:0004057 (arginyltransferase)
Q9ZTP4	
Q9ZTS1	
Q9ZUU1	GO:0004017 (adenylate kinase)
Q9ZUX1	GO:0008393 (fatty acid (omega-1)-hydroxylase)
Q9ZUY3	GO:0047769 (arogenate dehydratase)
Q9ZVI9	GO:0004306 (ethanolamine-phosphate cytidylyltransferase)
Q9ZWQ9	
Q9ZWT1	GO:0017140 (lipoic acid synthase)