

**Table S1.** The protein lists of common alterations in liver proteomics of young and aged *HBxAg<sup>1g/0</sup>* male mice.

Young-common upregulation	Young-common downregulation	Aged-common upregulation	Aged-common downregulation
Protein List	Protein List	Protein List	Protein List
Pre-mRNA-processing-splicing factor 8 < sp Q99PV0 PRP8_MOUSE >	Vigilin < sp Q8VDJ3 VIGLN_MOUSE >	Pre-mRNA-processing-splicing factor 8 < sp Q99PV0 PRP8_MOUSE >	Alpha-1,4 glucan phosphorylase < tr Q3UEJ6 Q3UEJ6_MOUSE >
Proteasome subunit alpha type-2 < sp P49722 PSA2_MOUSE >	Clathrin heavy chain < tr Q5SXR6 Q5SXR6_MOUSE >	Proteasome subunit alpha type-2 < sp P49722 PSA2_MOUSE >	39S ribosomal protein L3, mitochondrial < sp Q99N95 RM03_MOUSE >
Beta-enolase < sp P21550 ENOB_MOUSE >	D-beta-hydroxybutyrate dehydrogenase, mitochondrial < sp Q80XN0 BDH_MOUSE >	Beta-enolase < sp P21550 ENOB_MOUSE >	40S ribosomal protein S21 < sp Q9CQR2 RS21_MOUSE >
Eno3 protein < tr Q4FK59 Q4FK59_MOUSE >	Cytochrome P450 2C54 < sp Q6XVG2 CP254_MOUSE >	Eno3 protein < tr Q4FK59 Q4FK59_MOUSE >	Acyl-CoA synthetase family member 2, mitochondrial < sp Q8VCW8 ACSF2_MOUSE >
MCG10343, isoform CRA_b < tr G5E902 G5E902_MOUSE >	Isochormatase domain-containing protein 2A, mitochondrial < sp P85094 ISC2A_MOUSE >	MCG10343, isoform CRA_b < tr G5E902 G5E902_MOUSE >	Alkylated DNA repair protein alkB homolog 1 < sp POCB42 ALKB1_MOUSE >
Phosphate carrier protein, mitochondrial < sp Q8VEM8 MPCP_MOUSE >	Mitochondrial 10-formyltetrahydrofolate dehydrogenase < sp Q8K009 AL1L2_MOUSE >	Phosphate carrier protein, mitochondrial < sp Q8VEM8 MPCP_MOUSE >	ATP-binding cassette sub-family A member 1 < sp P41233 ABCA1_MOUSE >
Cytochrome b-c1 complex subunit 6, mitochondrial < sp P99028 QCR6_MOUSE >	Long-chain-fatty-acid-CoA ligase 1 < sp P41216 ACSL1_MOUSE >	Cytochrome b-c1 complex subunit 6, mitochondrial < sp P99028 QCR6_MOUSE >	Casein kinase II subunit beta < sp P67871 CSK2B_MOUSE >
Transmembrane emp24 domain-containing protein 4 < sp Q8R1V4 TMED4_MOUSE >	60S ribosomal protein L23 < sp P62830 RL23_MOUSE >	Transmembrane emp24 domain-containing protein 4 < sp Q8R1V4 TMED4_MOUSE >	Cathepsin H < tr Q922Q7 Q922Q7_MOUSE >
Epoxide hydrolase 1 < sp Q9D379 HYEP_MOUSE >	Glutathione S-transferase A2 < sp P10648 GSTA2_MOUSE >	Epoxide hydrolase 1 < sp Q9D379 HYEP_MOUSE >	Centrosomal protein of 290 kDa < sp Q6A078 CE290_MOUSE >
Protein Ugt2b34 < tr Q8K154 Q8K154_MOUSE >	Alpha-1,4 glucan phosphorylase < tr Q3UEJ6 Q3UEJ6_MOUSE >	Protein Ugt2b34 < tr Q8K154 Q8K154_MOUSE >	Cocaine- and amphetamine-regulated transcript protein < sp P56388 CART_MOUSE >
Phosphoglucomutase 2 < tr Q5RJV4 Q5RJV4_MOUSE >	39S ribosomal protein L3, mitochondrial < sp Q99N95 RM03_MOUSE >	Phosphoglucomutase 2 < tr Q5RJV4 Q5RJV4_MOUSE >	Collagen alpha-1(VI) chain < sp Q04857 CO6A1_MOUSE >
14-3-3 protein zeta/delta < sp P63101 1433Z_MOUSE >	40S ribosomal protein S21 < sp Q9CQR2 RS21_MOUSE >	14-3-3 protein zeta/delta < sp P63101 1433Z_MOUSE >	Dynein heavy chain 3, axonemal < sp Q8BW94 DYH3_MOUSE >
MCG1788 < tr Q3UEP4 Q3UEP4_MOUSE >	Acyl-CoA synthetase family member 2, mitochondrial < sp Q8VCW8 ACSF2_MOUSE >	MCG1788 < tr Q3UEP4 Q3UEP4_MOUSE >	E3 ubiquitin-protein ligase UBR4 < sp A2AN08 UBR4_MOUSE >
CDGSH iron-sulfur domain-containing protein 1 < sp Q91WS0 CISD1_MOUSE >	Alkylated DNA repair protein alkB homolog 1 < sp POCB42 ALKB1_MOUSE >	CDGSH iron-sulfur domain-containing protein 1 < sp Q91WS0 CISD1_MOUSE >	EGAM1 < tr Q3UL53 Q3UL53_MOUSE >
Glutathione S-transferase A4 < sp P24472 GSTA4_MOUSE >	ATP-binding cassette sub-family A member 1 < sp P41233 ABCA1_MOUSE >	Glutathione S-transferase A4 < sp P24472 GSTA4_MOUSE >	EGAM1N < tr B6ZND8 B6ZND8_MOUSE >
Glutathione S-transferase Mu 3 < sp P19639 GSTM4_MOUSE >	Casein kinase II subunit beta < sp P67871 CSK2B_MOUSE >	Glutathione S-transferase Mu 3 < sp P19639 GSTM4_MOUSE >	Fgd6 protein < tr B2RSV7 B2RSV7_MOUSE >
ATP synthase F(0) complex subunit B1, mitochondrial < sp Q9CQQ7 AT5F1_MOUSE >	Cathepsin H < tr Q922Q7 Q922Q7_MOUSE >	ATP synthase F(0) complex subunit B1, mitochondrial < sp Q9CQQ7 AT5F1_MOUSE >	FYVE, RhoGEF and PH domain-containing protein 6 < sp Q69ZL1 FGD6_MOUSE >
Ornithine aminotransferase, mitochondrial < sp P29758 OAT_MOUSE >	Centrosomal protein of 290 kDa < sp Q6A078 CE290_MOUSE >	Ornithine aminotransferase, mitochondrial < sp P29758 OAT_MOUSE >	Heme-binding protein 1 < sp Q9R257 HEBP1_MOUSE >
60S ribosomal protein L23a < sp P62751 RL23A_MOUSE >	Cocaine- and amphetamine-regulated transcript protein < sp P56388 CART_MOUSE >	60S ribosomal protein L23a < sp P62751 RL23A_MOUSE >	Heterogeneous nuclear ribonucleoprotein A1 < sp P49312 ROA1_MOUSE >
Alpha-1-antitrypsin 1-2 < sp P22599 A1AT2_MOUSE >	Collagen alpha-1(VI) chain < sp Q04857 CO6A1_MOUSE >	Alpha-1-antitrypsin 1-2 < sp P22599 A1AT2_MOUSE >	Hnrnpa112 protein < tr B7ZWG9 B7ZWG9_MOUSE >
Hemoglobin subunit alpha < sp P01942 HBA_MOUSE >	Dynein heavy chain 3, axonemal < sp Q8BW94 DYH3_MOUSE >	Hemoglobin subunit alpha < sp P01942 HBA_MOUSE >	Homolog of human Werners syndrome protein < tr Q35948 Q35948_MOUSE >
Histone H2B type 1-B < sp Q64475 H2B1B_MOUSE >	E3 ubiquitin-protein ligase UBR4 < sp A2AN08 UBR4_MOUSE >	Histone H2B type 1-B < sp Q64475 H2B1B_MOUSE >	Laminin subunit alpha-5 < sp Q61001 LAMA5_MOUSE >
Histone H2B type 1-F/J/L < sp P10853 H2B1F_MOUSE >	EGAM1 < tr Q3UL53 Q3UL53_MOUSE >	Histone H2B type 1-F/J/L < sp P10853 H2B1F_MOUSE >	Little elongation complex subunit 1 < sp E9Q286 ICE1_MOUSE >
Histone H2B type 1-P < sp Q8CGP2 H2B1P_MOUSE >	EGAM1N < tr B6ZND8 B6ZND8_MOUSE >	Histone H2B type 1-P < sp Q8CGP2 H2B1P_MOUSE >	MCG148116 < tr Q9D9Z8 Q9D9Z8_MOUSE >
ATP synthase subunit alpha < tr D3Z6F5 D3Z6F5_MOUSE >	Fgd6 protein < tr B2RSV7 B2RSV7_MOUSE >	ATP synthase subunit alpha < tr D3Z6F5 D3Z6F5_MOUSE >	Mitochondrial carnitine/acylcarnitine carrier protein < sp Q9Z2Z6 MCAT_MOUSE >
Histone H2A type 1 < sp P22752 H2A1_MOUSE >	FYVE, RhoGEF and PH domain-containing protein 6 < sp Q69ZL1 FGD6_MOUSE >	Histone H2A type 1 < sp P22752 H2A1_MOUSE >	Mitochondrial ribosomal protein L3 < tr Q91XB2 Q91XB2_MOUSE >
Histone H2A type 1-F < sp Q8CGP5 H2A1F_MOUSE >	Heme-binding protein 1 < sp Q9R257 HEBP1_MOUSE >	Histone H2A type 1-F < sp Q8CGP5 H2A1F_MOUSE >	Neuroguidin < sp Q9DB96 NGDN_MOUSE >
Histone H2A type 1-H < sp Q8CGP6 H2A1H_MOUSE >	Heterogeneous nuclear ribonucleoprotein A1 < sp P49312 ROA1_MOUSE >	Histone H2A type 1-H < sp Q8CGP6 H2A1H_MOUSE >	Nuclear-interacting partner of ALK < sp Q80YV2 NIPA_MOUSE >
Histone H2A type 3 < sp Q8BFU2 H2A3_MOUSE >	Hnrnpa112 protein < tr B7ZWG9 B7ZWG9_MOUSE >	Histone H2A type 3 < sp Q8BFU2 H2A3_MOUSE >	Nucleoside diphosphate kinase A < tr Q5NC79 Q5NC79_MOUSE >
60S ribosomal protein L7 < sp P14148 RL7_MOUSE >	Homolog of human Werners syndrome protein < tr Q35948 Q35948_MOUSE >	60S ribosomal protein L7 < sp P14148 RL7_MOUSE >	Palmitoyl-protein thioesterase < tr Q8VBX5 Q8VBX5_MOUSE >
Aspartate aminotransferase, cytoplasmic < sp P05201 AATC_MOUSE >	Laminin subunit alpha-5 < sp Q61001 LAMA5_MOUSE >	Aspartate aminotransferase, cytoplasmic < sp P05201 AATC_MOUSE >	Palmitoyl-protein thioesterase 1 < sp O88531 PPT1_MOUSE >
Argininosuccinate lyase < tr E0CXM2 E0CXM2_MOUSE >	Little elongation complex subunit 1 < sp E9Q286 ICE1_MOUSE >	Argininosuccinate lyase < tr E0CXM2 E0CXM2_MOUSE >	Parathyrimosin < sp Q9D0J8 PTMS_MOUSE >
60S ribosomal protein L35 < sp Q6ZVW7 RL35_MOUSE >	MCG148116 < tr Q9D9Z8 Q9D9Z8_MOUSE >	60S ribosomal protein L35 < sp Q6ZVW7 RL35_MOUSE >	Peroxisomal trans-2-enoyl-CoA reductase < sp Q99M27 PECR_MOUSE >
Protein NipSnap homolog 1 < sp O55125 NIP51_MOUSE >	Mitochondrial carnitine/acylcarnitine carrier protein < sp Q9Z2Z6 MCAT_MOUSE >	Protein NipSnap homolog 1 < sp O55125 NIP51_MOUSE >	Phospholipid-translocating ATPase < tr B9EJ52 B9EJ52_MOUSE >
Protein flightless-1 homolog < sp Q9JJ28 FLI1_MOUSE >	Mitochondrial ribosomal protein L3 < tr Q91XB2 Q91XB2_MOUSE >	Protein flightless-1 homolog < sp Q9JJ28 FLI1_MOUSE >	Probable phospholipid-transporting ATPase VD < sp Q8K2X1 AT10D_MOUSE >

Aldehyde dehydrogenase X, mitochondrial < sp Q9CZS1 AL1B1_MOUSE >	Neuroguidin < sp Q9DB96 NGDN_MOUSE >
Probable aminopeptidase NPEPL1 < sp Q6NSR8 PEPL1_MOUSE >	Nuclear-interacting partner of ALK < sp Q80YV2 NIPA_MOUSE >
Protein FAM3B < sp Q9D309 FAM3B_MOUSE >	Nucleoside diphosphate kinase A < tr Q5NC79 Q5NC79_MOUSE >
L-serine dehydratase/L-threonine deaminase < sp Q8VBT2 SDHL_MOUSE >	Palmitoyl-protein thioesterase < tr Q8VBX5 Q8VBX5_MOUSE >
MCG22989, isoform CRA_a < tr G3UY29 G3UY29_MOUSE >	Parathyrosin < sp Q9D0J8 PTMS_MOUSE >
RAS oncogene family protein < tr A0A068BFR3 A0A068BFR3_MOUSE >	Peroxisomal trans-2-enoyl-CoA reductase < sp Q99MZ7 PECR_MOUSE >
Ras-related protein Rab-11A < sp P62492 RB11A_MOUSE >	Phospholipid-translocating ATPase < tr B9EJ52 B9EJ52_MOUSE >
Ras-related protein Rab-11B < sp P46638 RB11B_MOUSE >	Probable phospholipid-transporting ATPase VD < sp Q8K2X1 AT10D_MOUSE >
NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial < sp Q9DCT2 NDU53_MOUSE >	Proteasome subunit beta type-5 < sp Q55234 PSB5_MOUSE >
Protein BC080695 < tr Q66JY9 Q66JY9_MOUSE >	Protein Crxos < tr V9GX9Y V9GX9Y_MOUSE >
B-cell receptor-associated protein 31 < sp Q61335 BAP31_MOUSE >	Protein Styx11 < tr D3YZ02 D3YZ02_MOUSE >
Acidic leucine-rich nuclear phosphoprotein 32 family member A < tr D3Z7M9 D3Z7M9_MOUSE >	Protein Taf4a < tr E9QAP7 E9QAP7_MOUSE >
Catechol O-methyltransferase < sp O88587 COMT_MOUSE >	Protein Wdr72 < tr D3YYM4 D3YYM4_MOUSE >
Very long-chain acyl-CoA synthetase < sp O35488 S27A2_MOUSE >	Protein Zfp948 < tr Q6DFU8 Q6DFU8_MOUSE >
Enoyl-CoA hydratase, mitochondrial < sp Q8BH95 ECHM_MOUSE >	Ptms protein < tr Q66JR8 Q66JR8_MOUSE >
Peroxisomal acyl-coenzyme A oxidase 2 < sp Q9QXD1 ACO2_MOUSE >	Putative sodium-coupled neutral amino acid transporter 10 < sp Q5I012 S38AA_MOUSE >
Disintegrin and metalloproteinase domain-containing protein 32 < sp Q8K410 ADA32_MOUSE >	Selection and upkeep of intraepithelial T-cells protein 5 < sp A7XUY5 SKIT5_MOUSE >
Protein Cngb1 < tr E1AZ71 E1AZ71_MOUSE >	Serine/threonine-protein kinase mTOR < sp Q9JLN9 MTOR_MOUSE >
Actin, cytoplasmic 1 < tr E9Q1F2 E9Q1F2_MOUSE >	Solute carrier family 25 (Mitochondrial carnitine/acylcarnitine translocase), member 20 < tr Q7TPW6 Q7TPW6_MOUSE >
60S ribosomal protein L21 < sp O09167 RL21_MOUSE >	TBC1 domain family member 9 < sp Q3UYK3 TBCD9_MOUSE >
Ribosomal protein L21 < tr Q4VA28 Q4VA28_MOUSE >	Transcription factor RFX3 < sp P48381 RFX3_MOUSE >
Phenylalanine-4-hydroxylase < sp P16331 PH4H_MOUSE >	V-set and transmembrane domain-containing protein 2A < sp Q8R0A6 VTM2A_MOUSE >
Argininosuccinate lyase < sp Q91Y10 ARLY_MOUSE >	Werner syndrome ATP-dependent helicase homolog < sp O09053 WRN_MOUSE >
Histidine triad nucleotide-binding protein 1 < sp P70349 HINT1_MOUSE >	Aldo-keto reductase family 1, member C19 < tr G3X9Y6 G3X9Y6_MOUSE >
Hydroxyacid oxidase 1 < sp Q9WU19 HAOX1_MOUSE >	Chromodomain-helicase-DNA-binding protein 6 < sp A3KFM7 CHD6_MOUSE >
40S ribosomal protein S10 < sp P63325 RS10_MOUSE >	Cysteine sulfinic acid decarboxylase < sp Q9DBE0 CSAD_MOUSE >
ATP synthase subunit gamma < tr A2AKU9 A2AKU9_MOUSE >	E3 ubiquitin-protein ligase DTX1 < sp Q61010 DTX1_MOUSE >
ATP synthase subunit gamma, mitochondrial < sp Q91VR2 ATPG_MOUSE >	Hgd protein < tr Q05BJ1 Q05BJ1_MOUSE >
Voltage-dependent anion-selective channel protein 1 < sp Q60932 VDAC1_MOUSE >	Histone-lysine N-methyltransferase < tr F8WI37 F8WI37_MOUSE >
Transaldolase < sp Q93092 TALDO_MOUSE >	Homogentisate 1, 2-dioxygenase < tr Q8CI38 Q8CI38_MOUSE >
Glutathione transferase class mu chain Yb2 (Fragments) < tr Q7M0F4 Q7M0F4_MOUSE >	Laminin subunit alpha-3 < sp Q61789 LAMA3_MOUSE >
Phosphatidylinositol 4-phosphate 5-kinase type-1 alpha < sp P70182 PI51A_MOUSE >	NADPH--cytochrome P450 reductase < sp P37040 NCPR_MOUSE >
Vimentin < sp P20152 VIME_MOUSE >	Proteasome subunit beta type < tr D3YUM8 D3YUM8_MOUSE >
Gstm7 protein < tr Q6PJ91 Q6PJ91_MOUSE >	Protocadherin-8 < sp Q7TSK3 PCDH8_MOUSE >
Serine protease inhibitor A3K < sp P07759 SPA3K_MOUSE >	Ribosomal protein L5 < tr Q3TKR5 Q3TKR5_MOUSE >
Histone H1.2 < sp P15864 H12_MOUSE >	S-formylglutathione hydrolase < sp Q9R0P3 ESTD_MOUSE >
Alad protein < tr Q8VCZ1 Q8VCZ1_MOUSE >	Tubulin beta-4A chain < sp Q9D6F9 TBB4A_MOUSE >

Proteasome subunit beta type-5 < sp Q55234 PSB5_MOUSE >
Protein Crxos < tr V9GX9Y V9GX9Y_MOUSE >
Protein Styx11 < tr D3YZ02 D3YZ02_MOUSE >
Protein Taf4a < tr E9QAP7 E9QAP7_MOUSE >
Protein Wdr72 < tr D3YYM4 D3YYM4_MOUSE >
Protein Zfp948 < tr Q6DFU8 Q6DFU8_MOUSE >
Protein Zfp955a < tr Q80XR7 Q80XR7_MOUSE >
Protein Zfp955b < tr L7N232 L7N232_MOUSE >
Ptms protein < tr Q66JR8 Q66JR8_MOUSE >
Putative sodium-coupled neutral amino acid transporter 10 < sp Q5I012 S38AA_MOUSE >
Selection and upkeep of intraepithelial T-cells protein 5 < sp A7XUY5 SKIT5_MOUSE >
Serine/threonine-protein kinase mTOR < sp Q9JLN9 MTOR_MOUSE >
Solute carrier family 25 (Mitochondrial carnitine/acylcarnitine translocase), member 20 < tr Q7TPW6 Q7TPW6_MOUSE >
TBC1 domain family member 9 < sp Q3UYK3 TBCD9_MOUSE >
Transcription factor RFX3 < sp P48381 RFX3_MOUSE >
V-set and transmembrane domain-containing protein 2A < sp Q8R0A6 VTM2A_MOUSE >
Werner syndrome ATP-dependent helicase homolog < sp O09053 WRN_MOUSE >
Aldo-keto reductase family 1, member C19 < tr G3X9Y6 G3X9Y6_MOUSE >
Chromodomain-helicase-DNA-binding protein 6 < sp A3KFM7 CHD6_MOUSE >
Cysteine sulfinic acid decarboxylase < sp Q9DBE0 CSAD_MOUSE >
E3 ubiquitin-protein ligase DTX1 < sp Q61010 DTX1_MOUSE >
Hgd protein < tr Q05BJ1 Q05BJ1_MOUSE >
Histone-lysine N-methyltransferase < tr F8WI37 F8WI37_MOUSE >
Homogentisate 1, 2-dioxygenase < tr Q8CI38 Q8CI38_MOUSE >
Laminin subunit alpha-3 < sp Q61789 LAMA3_MOUSE >
NADPH--cytochrome P450 reductase < sp P37040 NCPR_MOUSE >
Proteasome subunit beta type < tr D3YUM8 D3YUM8_MOUSE >
Protocadherin-8 < sp Q7TSK3 PCDH8_MOUSE >
Ribosomal protein L5 < tr Q3TKR5 Q3TKR5_MOUSE >
S-formylglutathione hydrolase < sp Q9R0P3 ESTD_MOUSE >
Tubulin beta-4A chain < sp Q9D6F9 TBB4A_MOUSE >
Vesicle-associated membrane protein 1 < tr D3YTU0 D3YTU0_MOUSE >
IQ motif containing GTPase activating protein 2 < tr B9EKK3 B9EKK3_MOUSE >
Peroxisomal reductase, mitochondrial < sp P99029 PRDX5_MOUSE >
Ras GTPase-activating-like protein IQGAP2 < sp Q3UQ44 IQGA2_MOUSE >
Terminal uridylyltransferase 7 < sp Q5BLK4 TUT7_MOUSE >
Terminal uridylyltransferase 7 < tr E9PUA2 E9PUA2_MOUSE >

Delta-aminolevulinic acid dehydratase < sp P10518 HEM2_MOUSE >	Vesicle-associated membrane protein 1 < tr D3YTU0 D3YTU0_MOUSE >
Voltage-dependent anion-selective channel protein 2 < sp Q60930 VDAC2_MOUSE >	IQ motif containing GTPase activating protein 2 < tr B9EKK3 B9EKK3_MOUSE >
Enolase < tr D3Z6E4 D3Z6E4_MOUSE >	Peroxisomal protein 5, mitochondrial < sp P99029 PRDX5_MOUSE >
Gamma-enolase < sp P17183 ENOG_MOUSE >	Ras GTPase-activating-like protein IQGAP2 < sp Q3UQ44 IQGA2_MOUSE >
E3 ubiquitin-protein ligase TRIM31 < sp Q8R0K2 TRI31_MOUSE >	Terminal uridylyltransferase 7 < sp Q5BLK4 TUT7_MOUSE >
Cytochrome c oxidase subunit NDUF4 < sp Q62425 NDUA4_MOUSE >	Uncharacterized protein < tr V9GX38 V9GX38_MOUSE >
40S ribosomal protein S13 < sp P62301 RS13_MOUSE >	4-aminobutyrate aminotransferase, mitochondrial < sp P61922 GABT_MOUSE >
Protein CREG1 < sp O88668 CREG1_MOUSE >	Glycogen [starch] synthase, liver < sp Q8VCB3 GYS2_MOUSE >
Cytochrome b-c1 complex subunit 8 < sp Q9CQ69 QCR8_MOUSE >	Ubiquitin-like modifier-activating enzyme 1 < sp Q02053 UBA1_MOUSE >
Carcinoembryonic antigen-related cell adhesion molecule 1 < sp P31809 CEAM1_MOUSE >	Fatty acid-binding protein, intestinal < sp P55050 FABPI_MOUSE >
CEA-related cell adhesion molecule 1 < tr Q925P3 Q925P3_MOUSE >	ATPase, Na+/K+ transporting, alpha 3 polypeptide < tr Q8VCE0 Q8VCE0_MOUSE >
Uncharacterized protein < tr Q3LFS5 Q3LFS5_MOUSE >	Inactive phospholipase C-like protein 1 < sp Q3USB7 PLCL1_MOUSE >
Alpha-1-antitrypsin 1-1 < sp P07758 A1AT1_MOUSE >	Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial < sp A2ATU0 DHTK1_MOUSE >
Alpha-1-antitrypsin 1-3 < sp Q00896 A1AT3_MOUSE >	Sodium/potassium-transporting ATPase subunit alpha-3 < sp Q6PIC6 AT1A3_MOUSE >
Histone H2B < tr Q8CBB6 Q8CBB6_MOUSE >	17-beta-hydroxysteroid dehydrogenase type 6 < sp Q9R092 H17B6_MOUSE >
Histone H2B type 1-K < sp Q8CGP1 H2B1K_MOUSE >	Protein Agl < tr F8VPN4 F8VPN4_MOUSE >
Peroxisomal bifunctional enzyme < sp Q9DBM2 ECHP_MOUSE >	Heat shock cognate 71 kDa protein < tr Q504P4 Q504P4_MOUSE >
60S ribosomal protein L26 < sp P61255 RL26_MOUSE >	Rab15 protein < tr Q91YW0 Q91YW0_MOUSE >
ATP synthase subunit d, mitochondrial < sp Q9DCX2 ATP5H_MOUSE >	Ras-related protein Rab-15 < sp Q8K386 RAB15_MOUSE >
MCG55033 < tr G3X9L6 G3X9L6_MOUSE >	UTP--glucose-1-phosphate uridylyltransferase < sp Q91ZJ5 UGPA_MOUSE >
Histone H2A < tr F8WIX8 F8WIX8_MOUSE >	Protein Gm17430 < tr F6RSK3 F6RSK3_MOUSE >
Histone H2A type 2-A < sp Q6GSS7 H2A2A_MOUSE >	EG627828 protein < tr B2RXM2 B2RXM2_MOUSE >
Epoxide hydrolase 2C < tr A8JYK8 A8JYK8_MOUSE >	Heterogeneous nuclear ribonucleoprotein A3 < sp Q8BG05 ROA3_MOUSE >
Cytochrome b-c1 complex subunit 2, mitochondrial < sp Q9DB77 QCR2_MOUSE >	Hnrpa3 protein < tr Q5U3M2 Q5U3M2_MOUSE >
60S ribosomal protein L7a < sp P12970 RL7A_MOUSE >	Uncharacterized protein < tr E9Q7H5 E9Q7H5_MOUSE >
Ribosomal protein L7A < tr Q5EBG5 Q5EBG5_MOUSE >	Adenosylhomocysteinase < tr Q3U5U5 Q3U5U5_MOUSE >
Prohibitin-2 < sp Q35129 PHB2_MOUSE >	Retinol dehydrogenase 7 < sp Q88451 RDH7_MOUSE >
Cytochrome b5 type B < sp Q9CQX2 CYB5B_MOUSE >	3-hydroxyacyl-CoA dehydrogenase type-2 < tr A2AFQ2 A2AFQ2_MOUSE >
Malate dehydrogenase, cytoplasmic < sp P14152 MDHC_MOUSE >	Phenazine biosynthesis-like domain-containing protein 1 < sp Q9DCG6 PBLD1_MOUSE >
Histone H1.0 < sp P10922 H10_MOUSE >	Phenazine biosynthesis-like domain-containing protein 2 < sp Q9CXN7 PBLD2_MOUSE >
40S ribosomal protein S3 < sp P62908 RS3_MOUSE >	Cytosolic 10-formyltetrahydrofolate dehydrogenase < sp Q8R0Y6 AL1L1_MOUSE >
Glutathione S-transferase Mu 1 < sp P10649 GSTM1_MOUSE >	4-hydroxyphenylpyruvate dioxygenase < sp P49429 HPPD_MOUSE >
14-3-3 protein theta < sp P68254 1433T_MOUSE >	D-dopachrome decarboxylase < sp Q35215 DOPD_MOUSE >
Sodium/bile acid cotransporter < sp O08705 NTCP_MOUSE >	60S ribosomal protein L27a < sp P14115 RL27A_MOUSE >
Transcription factor BTF3 homolog 4 < sp Q9CQH7 BT3L4_MOUSE >	4-hydroxy-2-oxoglutarate aldolase, mitochondrial < sp Q9DCU9 HOGA1_MOUSE >
Protein Acat3 < tr F2Z459 F2Z459_MOUSE >	Destrin < sp Q9R0P5 DEST_MOUSE >
Acetyl CoA transferase-like protein < tr Q8R4V3 Q8R4V3_MOUSE >	Ribosomal protein L14 < tr Q569Z0 Q569Z0_MOUSE >

Uncharacterized protein < tr V9GX38 V9GX38_MOUSE >
4-aminobutyrate aminotransferase, mitochondrial < sp P61922 GABT_MOUSE >
Glycogen [starch] synthase, liver < sp Q8VCB3 GYS2_MOUSE >
Ubiquitin-like modifier-activating enzyme 1 < sp Q02053 UBA1_MOUSE >
Fatty acid-binding protein, intestinal < sp P55050 FABPI_MOUSE >
ATPase, Na+/K+ transporting, alpha 3 polypeptide < tr Q8VCE0 Q8VCE0_MOUSE >
Inactive phospholipase C-like protein 1 < sp Q3USB7 PLCL1_MOUSE >
Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial < sp A2ATU0 DHTK1_MOUSE >
Sodium/potassium-transporting ATPase subunit alpha-3 < sp Q6PIC6 AT1A3_MOUSE >
17-beta-hydroxysteroid dehydrogenase type 6 < sp Q9R092 H17B6_MOUSE >
Protein Agl < tr F8VPN4 F8VPN4_MOUSE >
Heat shock cognate 71 kDa protein < tr Q504P4 Q504P4_MOUSE >
Glutathione S-transferase A2 < sp P10648 GSTA2_MOUSE >
60S ribosomal protein L23 < sp P62830 RL23_MOUSE >
Long-chain-fatty-acid--CoA ligase 1 < sp P41216 ACSL1_MOUSE >
Mitochondrial 10-formyltetrahydrofolate dehydrogenase < sp Q8K009 AL1L2_MOUSE >
Cytochrome P450 2C54 < sp Q6XVG2 CP254_MOUSE >
Isochorismatase domain-containing protein 2A, mitochondrial < sp P85094 ISC2A_MOUSE >
D-beta-hydroxybutyrate dehydrogenase, mitochondrial < sp Q80XN0 BDH_MOUSE >
Claithrin heavy chain < tr Q55XR6 Q55XR6_MOUSE >
Vigilin < sp Q8VDJ3 VIGLN_MOUSE >

NADH dehydrogenase (Ubiquinone) Fe-S protein 8 < tr Q8VC72 Q8VC72_MOUSE >	SEC14-like protein 4 < sp Q8R0F9 S14L4_MOUSE >
NADH dehydrogenase [ubiquinone] iron-sulfur protein 8, mitochondrial < sp Q8K3J1 NDUS8_MOUSE >	Carboxylesterase 3B < sp Q8VCU1 EST3B_MOUSE >
Transmembrane emp24 domain-containing protein 9 < sp Q99KF1 TMED9_MOUSE >	OBOX3 < tr Q8VHG6 Q8VHG6_MOUSE >
Diaphanous homolog 3 (Drosophila) < tr Q0VGT1 Q0VGT1_MOUSE >	Alpha-2-macroglobulin < sp Q61838 A2M_MOUSE >
Protein diaphanous homolog 3 < sp Q9Z207 DIAP3_MOUSE >	Crystallin, zeta < tr Q80XR3 Q80XR3_MOUSE >
Ephx1 protein < tr Q6PEV0 Q6PEV0_MOUSE >	Quinone oxidoreductase < sp P47199 QOR_MOUSE >
40S ribosomal protein S11 < sp P62281 RS11_MOUSE >	4921524L21Rik protein < tr Q80W38 Q80W38_MOUSE >
Protein Mup13 < tr L7N222 L7N222_MOUSE >	MCG15536 < tr Q9D5T2 Q9D5T2_MOUSE >
	Glutathione S-transferase theta-1 < tr D3Z3X5 D3Z3X5_MOUSE >
	Pyrethroid hydrolase Ces2e < sp Q8BK48 EST2E_MOUSE >
	Guanine nucleotide-binding protein subunit beta-2-like 1 < sp P68040 GBLP_MOUSE >
	Pyruvate kinase < tr A7MCU9 A7MCU9_MOUSE >
	Pyruvate kinase PKLR < sp P53657 KPYR_MOUSE >
	PCTP-like protein < sp Q9JMD3 PCTL_MOUSE >
	Aldose 1-epimerase < sp Q8K157 GALM_MOUSE >
	10-formyltetrahydrofolate dehydrogenase < tr Q8CIF2 Q8CIF2_MOUSE >
	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial < sp Q8K2B3 SDHA_MOUSE >
	MCG115977 < tr G3UWG1 G3UWG1_MOUSE >
	Lactoylglutathione lyase < sp Q9CPU0 LGUL_MOUSE >
	Glutamine synthetase < sp P15105 GLNA_MOUSE >
	ARL14 effector protein < sp Q8BIX3 AL14E_MOUSE >
	Glutaryl-CoA dehydrogenase, mitochondrial < sp Q60759 GCDH_MOUSE >
	Aldo-keto reductase family 1 member C13 < sp Q8VC28 AK1CD_MOUSE >
	Dihydrodiol dehydrogenase < tr Q54A37 Q54A37_MOUSE >
	Protein Cyp2d34 < tr L7N463 L7N463_MOUSE >
	Protein NDRG2 < sp Q9QYG0 NDRG2_MOUSE >
	Sulfite oxidase, mitochondrial < sp Q8R086 SUOX_MOUSE >
	4933430117Rik protein < tr Q14AX1 Q14AX1_MOUSE >
	Aldehyde dehydrogenase < tr Q8C5J1 Q8C5J1_MOUSE >
	Dimethylarginine dimethylaminohydrolase 1, isoform CRA_a < tr D3YU15 D3YU15_MOUSE >
	Signal sequence receptor, delta < tr Q9D8L3 Q9D8L3_MOUSE >
	Sphingosine 1-phosphate receptor 3 < sp Q9Z0U9 S1PR3_MOUSE >
	Translocon-associated protein subunit delta < sp Q62186 SSRD_MOUSE >
	Catalase < sp P24270 CATA_MOUSE >
	Protein 201011101Rik < tr F8WGB2 F8WGB2_MOUSE >
	2-hydroxyacyl-CoA lyase 1 < sp Q9QXE0 HACL1_MOUSE >
	Adenosine kinase < sp P55264 ADK_MOUSE >

Tubulin beta-2B chain < sp Q9CWF2 TBB2B_MOUSE >
Protein phosphatase 1D < sp Q9QZ67 PPM1D_MOUSE >
GTP cyclohydrolase 1 feedback regulatory protein < sp P99025 GFRP_MOUSE >
Histidine ammonia-lyase < sp P35492 HUTH_MOUSE >
Xin actin-binding repeat-containing protein 2 < sp Q4U4S6 XIRP2_MOUSE >
Complement C3 < sp P01027 CO3_MOUSE >
Pyrethroid hydrolase Ces2a < sp Q8QZR3 EST2A_MOUSE >
Glutathione S-transferase theta 3 < tr Q99L20 Q99L20_MOUSE >
Isobutyryl-CoA dehydrogenase, mitochondrial < sp Q9D7B6 ACAD8_MOUSE >
Acyl-coenzyme A synthetase ACSM1, mitochondrial < sp Q91VA0 ACSM1_MOUSE >
Aldo-keto reductase family 1 member C21 < sp Q91WR5 AK1CL_MOUSE >
Fibrinogen gamma chain < sp Q8VCM7 FIBG_MOUSE >
Leucine-rich repeat-containing protein 59 < sp Q922Q8 LRC59_MOUSE >
40S ribosomal protein S18 < tr S4R1N6 S4R1N6_MOUSE >
60S ribosomal protein L27 < sp P61358 RL27_MOUSE >
Tubulin beta-5 chain < sp P99024 TBB5_MOUSE >
Protein A730017C20Rik < tr E9Q5J6 E9Q5J6_MOUSE >
Rpl37a protein < tr Q5M9N6 Q5M9N6_MOUSE >
UPF0258 protein KIAA1024-like homolog < sp Q8C4X7 K102L_MOUSE >
Homeobox protein Nkx-2.1 < sp P50220 NKX21_MOUSE >
NK2 homeobox 1 < tr Q6PFE0 Q6PFE0_MOUSE >
Alpha-1,4 glucan phosphorylase < tr Q3TJQ7 Q3TJQ7_MOUSE >