

Entrez Gene Name	Entrez Gene ID	Protein Name	Panel
<a href="#">ABCD3</a>	19299	ATP-binding cassette, sub-family D (ALD), member 3(Abcd3)	Fatty Acid Metabolism
<a href="#">Acaa1a</a>	113868	acetyl-Coenzyme A acyltransferase 1A(Acaa1a)	Fatty Acid Metabolism
<a href="#">Acaa1b</a>	235674	acetyl-Coenzyme A acyltransferase 1B(Acaa1b)	Fatty Acid Metabolism
<a href="#">ACAA2</a>	52538	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)(Acaa2)	Fatty Acid Metabolism
<a href="#">ACAD11</a>	102632	acyl-Coenzyme A dehydrogenase family, member 11(Acad11)	Fatty Acid Metabolism
<a href="#">ACADL</a>	11363	acyl-Coenzyme A dehydrogenase, long-chain(Acadl)	Fatty Acid Metabolism
<a href="#">ACADM</a>	11364	acyl-Coenzyme A dehydrogenase, medium chain(Acadm)	Fatty Acid Metabolism
<a href="#">ACADS</a>	11409	acyl-Coenzyme A dehydrogenase, short chain(Acads)	Fatty Acid Metabolism
<a href="#">ACADVL</a>	11370	acyl-Coenzyme A dehydrogenase, very long chain(Acadvl)	Fatty Acid Metabolism
<a href="#">ACO2</a>	11429	aconitase 2, mitochondrial(Aco2)	TCA Cycle
<a href="#">ACOT13</a>	66834	acyl-CoA thioesterase 13(Acot13)	Fatty Acid Metabolism
<a href="#">ACOX1</a>	11430	acyl-Coenzyme A oxidase 1, palmitoyl(Acox1)	Fatty Acid Metabolism
<a href="#">ACSL1</a>	14081	acyl-CoA synthetase long-chain family member 1(Acs1)	Fatty Acid Metabolism
<a href="#">ACTA1</a>	11459	actin, alpha 1, skeletal muscle(Acta1)	Housekeeping
<a href="#">ACTB</a> , <a href="#">ACTG1</a>	11461, 11465	actin, beta(Actb); actin, gamma, cytoplasmic 1(Actg1)	Housekeeping
<a href="#">Akr1b3</a>	11677	aldo-keto reductase family 1, member B3 (aldose reductase)(Akr1b3)	Stress Response
<a href="#">ALB</a>	11657	albumin(Alb)	Housekeeping
<a href="#">ALDH1A1</a>	11668	aldehyde dehydrogenase family 1, subfamily A1(Aldh1a1)	Stress Response
<a href="#">ALDH2</a>	11669	aldehyde dehydrogenase 2, mitochondrial(Aldh2)	Stress Response
<a href="#">ALDOA</a>	11674	aldolase A, fructose-bisphosphate(Aldoa)	Carbohydrate Metabolism
<a href="#">ALDOB</a>	230163	aldolase B, fructose-bisphosphate(Aldob)	Carbohydrate Metabolism
<a href="#">ALDOC</a>	11676	aldolase C, fructose-bisphosphate(Aldoc)	Carbohydrate Metabolism
<a href="#">BDH1</a>	71911	3-hydroxybutyrate dehydrogenase, type 1(Bdh1)	Fatty Acid Metabolism
<a href="#">CALR</a>	12317	calreticulin(Calr)	Housekeeping
<a href="#">CAT</a>	12359	catalase(Cat)	Stress Response
<a href="#">CPT1A</a>	12894	carnitine palmitoyltransferase 1a, liver(Cpt1a)	Fatty Acid Metabolism
<a href="#">CPT1B</a>	12895	carnitine palmitoyltransferase 1b, muscle(Cpt1b)	Fatty Acid Metabolism
<a href="#">cpt2</a>	12896	carnitine palmitoyltransferase 2(Cpt2)	Fatty Acid Metabolism
<a href="#">CRAT</a>	12908	carnitine acetyltransferase(Crat)	Fatty Acid Metabolism
<a href="#">CROT</a>	74114	carnitine O-octanoyltransferase(Crot)	Fatty Acid Metabolism
<a href="#">CRYAB</a>	12955	crystallin, alpha B(Cryab)	Stress Response
<a href="#">CS</a>	12974	citrate synthase(Cs)	TCA Cycle
<a href="#">DECR1</a>	67460	2,4-dienoyl CoA reductase 1, mitochondrial(Decr1)	Fatty Acid Metabolism
<a href="#">DLAT</a>	235339	dihydrolipoamide S-acetyltransferase (E2 component of pyruvate dehydrogenase complex)(Dlat)	TCA Cycle
<a href="#">DLD</a>	13382	dihydrolipoamide dehydrogenase(Dld)	TCA Cycle
<a href="#">DLST</a>	78920	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)(Dlst)	TCA Cycle
<a href="#">ECH1</a>	51798	enoyl coenzyme A hydratase 1, peroxisomal(Ech1)	Fatty Acid Metabolism
<a href="#">ECHS1</a>	93747	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial(Echs1)	Fatty Acid Metabolism
<a href="#">ECI1</a>	13177	enoyl-Coenzyme A delta isomerase 1(Eci1)	Fatty Acid Metabolism
<a href="#">ECI2</a>	23986	enoyl-Coenzyme A delta isomerase 2(Eci2)	Fatty Acid Metabolism
<a href="#">ehhadh</a>	74147	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase(Ehhadh)	Fatty Acid Metabolism
<a href="#">ENO1</a>	13806	enolase 1, alpha non-neuron(Eno1)	Carbohydrate Metabolism
<a href="#">ENO2</a>	13807	enolase 2, gamma neuronal(Eno2)	Carbohydrate Metabolism
<a href="#">ENO3</a>	13808	enolase 3, beta muscle(Eno3)	Carbohydrate Metabolism
<a href="#">FABP1</a>	14080	fatty acid binding protein 1, liver(Fabp1)	Fatty Acid Metabolism
<a href="#">FABP3</a>	14077	fatty acid binding protein 3, muscle and heart(Fabp3)	Fatty Acid Metabolism
<a href="#">FABP4</a>	11770	fatty acid binding protein 4, adipocyte(Fabp4)	Fatty Acid Metabolism

<a href="#">FBP1</a>	14121	fructose biphosphatase 1(Fbp1)	Carbohydrate Metabolism
<a href="#">Fh1</a>	14194	fumarate hydratase 1(Fh1)	TCA Cycle
<a href="#">GAPDH</a>	14433	glyceraldehyde-3-phosphate dehydrogenase(Gapdh)	Carbohydrate Metabolism
<a href="#">GOT1</a>	14718	glutamic-oxaloacetic transaminase 1, soluble(Got1)	Carbohydrate Metabolism
<a href="#">GOT2</a>	14719	glutamatic-oxaloacetic transaminase 2, mitochondrial(Got2)	Carbohydrate Metabolism
<a href="#">Gpi1</a>	14751	glucose phosphate isomerase 1(Gpi1)	Carbohydrate Metabolism
<a href="#">GPX1</a>	14775	glutathione peroxidase 1(Gpx1)	Stress Response
<a href="#">GPX4</a>	625249	glutathione peroxidase 4(Gpx4)	Stress Response
<a href="#">GSR</a>	14782	glutathione reductase(Gsr)	Stress Response
<a href="#">GSTA3</a>	14859	glutathione S-transferase, alpha 3(Gsta3)	Stress Response
<a href="#">GSTA4</a>	14860	glutathione S-transferase, alpha 4(Gsta4)	Stress Response
<a href="#">GSTM1</a>	14862	glutathione S-transferase, mu 1(Gstm1)	Stress Response
<a href="#">GSTP1</a>	14870	glutathione S-transferase, pi 1(Gstp1)	Stress Response
<a href="#">HADH</a>	15107	hydroxyacyl-Coenzyme A dehydrogenase(Hadh)	Fatty Acid Metabolism
<a href="#">HADHA</a>	97212	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit(Hadha)	Fatty Acid Metabolism
<a href="#">HADHB</a>	231086	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit(Hadhb)	Fatty Acid Metabolism
<a href="#">HBA</a>	15121	hemoglobin alpha chain complex(Hba)	Housekeeping
<a href="#">HBB</a>	15127	hemoglobin beta chain complex(Hbb)	Housekeeping
<a href="#">HK1</a>	15275	hexokinase 1(Hk1)	Carbohydrate Metabolism
<a href="#">HK2</a>	15277	hexokinase 2(Hk2)	Carbohydrate Metabolism
<a href="#">HMGCL</a>	15356	3-hydroxy-3-methylglutaryl-Coenzyme A lyase(Hmgcl)	Fatty Acid Metabolism
<a href="#">HMGCS1</a>	208715	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1(Hmgcs1)	Fatty Acid Metabolism
<a href="#">HMGCS2</a>	15360	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2(Hmgcs2)	Fatty Acid Metabolism
<a href="#">HSD17B4</a>	15488	hydroxysteroid (17-beta) dehydrogenase 4(Hsd17b4)	Fatty Acid Metabolism
<a href="#">HSP90B1</a>	22027	heat shock protein 90, beta (Grp94), member 1(Hsp90b1)	Stress Response
<a href="#">HSPA1A</a>	193740	heat shock protein 1A(Hspa1a)	Stress Response
<a href="#">HSPA5</a>	14828	heat shock protein 5(Hspa5)	Stress Response
<a href="#">HSPA9</a>	15526	heat shock protein 9(Hspa9)	Stress Response
<a href="#">HSPD1</a>	15510	heat shock protein 1 (chaperonin)(Hspd1)	Stress Response
<a href="#">idh1</a>	15926	isocitrate dehydrogenase 1 (NADP+), soluble(Idh1)	TCA Cycle
<a href="#">IDH2</a>	269951	isocitrate dehydrogenase 2 (NADP+), mitochondrial(Idh2)	TCA Cycle
<a href="#">IDH3A</a>	67834	isocitrate dehydrogenase 3 (NAD+) alpha(Idh3a)	TCA Cycle
<a href="#">IDH3B</a>	170718	isocitrate dehydrogenase 3 (NAD+) beta(Idh3b)	TCA Cycle
<a href="#">IDH3G</a>	15929	isocitrate dehydrogenase 3 (NAD+), gamma(Idh3g)	TCA Cycle
<a href="#">LDHA</a>	16828	lactate dehydrogenase A(Ldha)	Carbohydrate Metabolism
<a href="#">LDHB</a>	16832	lactate dehydrogenase B(Ldhb)	Carbohydrate Metabolism
<a href="#">LONP1</a>	74142	lon peptidase 1, mitochondrial(Lonp1)	Stress Response
<a href="#">LONP2</a>	66887	lon peptidase 2, peroxisomal(Lonp2)	Stress Response
<a href="#">MDH1</a>	17449	malate dehydrogenase 1, NAD (soluble)(Mdh1)	TCA Cycle
<a href="#">MDH2</a>	17448	malate dehydrogenase 2, NAD (mitochondrial)(Mdh2)	TCA Cycle
<a href="#">MPC1</a>	55951	mitochondrial pyruvate carrier 1(Mpc1)	Carbohydrate Metabolism
<a href="#">MPC2</a>	70456	mitochondrial pyruvate carrier 2(Mpc2)	Carbohydrate Metabolism
<a href="#">MSRA</a>	110265	methionine sulfoxide reductase A(Msra)	Stress Response
<a href="#">OGDH</a>	18293	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)(Ogdh)	TCA Cycle
<a href="#">PCK1</a>	18534	phosphoenolpyruvate carboxykinase 1, cytosolic(Pck1)	Carbohydrate Metabolism
<a href="#">Pcx</a>	18563	pyruvate carboxylase(Pcx)	Carbohydrate Metabolism
<a href="#">PDHA1</a>	18597	pyruvate dehydrogenase E1 alpha 1(Pdha1)	TCA Cycle
<a href="#">PDHB</a>	68263	pyruvate dehydrogenase (lipoamide) beta(Pdhb)	TCA Cycle
<a href="#">PECR</a>	111175	peroxisomal trans-2-enoyl-CoA reductase(Pecr)	Fatty Acid Metabolism
<a href="#">PFKL</a>	18641	phosphofructokinase, liver, B-type(Pfkl)	Carbohydrate Metabolism

<a href="#">PFKM</a>	18642	phosphofructokinase, muscle(Pfkm)	Carbohydrate Metabolism
<a href="#">PGAM1</a>	18648	phosphoglycerate mutase 1(Pgam1)	Carbohydrate Metabolism
<a href="#">PHB</a>	18673	prohibitin(Phb)	Stress Response
<a href="#">PHB2</a>	12034	prohibitin 2(Phb2)	Stress Response
<a href="#">PPIA</a>	268373	peptidylprolyl isomerase A(Ppia)	Housekeeping
<a href="#">PRDX1</a>	18477	peroxiredoxin 1(Prdx1)	Stress Response
<a href="#">PRDX2</a>	21672	peroxiredoxin 2(Prdx2)	Stress Response
<a href="#">PRDX3</a>	11757	peroxiredoxin 3(Prdx3)	Stress Response
<a href="#">PRDX5</a>	54683	peroxiredoxin 5(Prdx5)	Stress Response
<a href="#">PRDX6</a>	11758	peroxiredoxin 6(Prdx6)	Stress Response
<a href="#">SDHA</a>	66945	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)(Sdha)	TCA Cycle
<a href="#">SDHB</a>	67680	succinate dehydrogenase complex, subunit B, iron sulfur (Ip)(Sdhb)	TCA Cycle
<a href="#">SDHC</a>	66052	succinate dehydrogenase complex, subunit C, integral membrane protein(Sdhc)	TCA Cycle
<a href="#">SLC25A11</a>	67863	solute carrier family 25 (mitochondrial carrier oxoglutarate carrier), member 11(Slc25a11)	TCA Cycle
<a href="#">SLC25A20</a>	57279	solute carrier family 25 (mitochondrial carnitine/acylcarnitine translocase), member 20(Slc25a20)	Fatty Acid Metabolism
<a href="#">SOD1</a>	20655	superoxide dismutase 1, soluble(Sod1)	Stress Response
<a href="#">SOD2</a>	20656	superoxide dismutase 2, mitochondrial(Sod2)	Stress Response
<a href="#">SUCLA2</a>	20916	succinate-Coenzyme A ligase, ADP-forming, beta subunit(Sucla2)	TCA Cycle
<a href="#">SUCLG1</a>	56451	succinate-CoA ligase, GDP-forming, alpha subunit(Suclg1)	TCA Cycle
tubAlpha	NA	Alpha Tubulin	Housekeeping
tubBeta	NA	Beta Tubulin	Housekeeping
<a href="#">Txn1</a>	22166	thioredoxin 1(Txn1)	Stress Response
<a href="#">TXNRD1</a>	50493	thioredoxin reductase 1(Txnrd1)	Stress Response
<a href="#">VDAC1</a>	22333	voltage-dependent anion channel 1(Vdac1)	Housekeeping
<a href="#">VDAC2</a>	22334	voltage-dependent anion channel 2(Vdac2)	Housekeeping
<a href="#">VDAC3</a>	22335	voltage-dependent anion channel 3(Vdac3)	Housekeeping