

Table S3. Mouse primer sequences for gene expression analysis in tissue.

Symbol	Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')
Acox1	Acyl-coenzyme A oxidase 1	CCAATCATGCGATAGTCCTGGC	CTTCAGGTAGCCATTATCCATCTC
Actb	Actin, beta	CCACTGCCGCATCCTCTTCC	GCCACAGGATTCCATACCCAAGA
Ahcy	S-adenosylhomocysteine hydrolase	CAGCTTCTGTGAGGCATCCG	AACTTGCTCTTGGTGACAGAATCG
Bhmt	Betaine-homocysteine methyltransferase	GGAGGCTGCGCGTTGAAA	CTAGTGGCAACTCGGGGTTCC
Bhmt2	Betaine-homocysteine methyltransferase 2	CAT CCA AGT GCA GTT CGT CAA CT	TGC ATT CAC AGC TTC CCA CTT G
Cbs	Cystathionine β -synthase	CACAGTGCTGACCAAATCCCCC	CACACTTGCCCAAGAGCTCAC
Chdh	Choline dehydrogenase	CACGTCAGGCTGGCTACCC	GCAAGTAGGCGCAGGCTG
Cpt1a	Carnitine palmitoyltransferase 1a	GTCCCAGCTGTCAAAGATACCG	ATGGCGTAGTAGTTGCTGTTAACC
Csad	Cysteine sulfinic acid decarboxylase	GAGGACCTGGAGAGGCAGATC	CAAACATCGGCAATTGCATCCAG
Cth	Cystathionase	GCTAGAGGCAGCGATTACACC	GCAGACATGAAGGTGTTATCTACAACC
Dmgdh	Dimethylglycine dehydrogenase precursor	GGCACGCAGCAGGTTTAAACAAC	GGAATCCCACCACCTGTCCGG
Dnmt1	DNA methyltransferase 1	GGAAGGCTACCTGGCTAAAGTCAAG	GGGTGTCCTGTCCGACTTGC
Dnmt3a	DNA methyltransferase 3A	TGGAGAATGGCTGCTGTGTGAC	CACTCATCCCCTTTCCGTTTG
Dnmt3b	DNA methyltransferase 3B	AGTGACCAGTCCTCAGACACGAAG	ATCAGAGCCATTCCCATCATCTAC
Gapdh	Glyceraldehyde-3-phosphate dehydrogenase	CCTGGAGAAACCTGCCAAGTATG	GAGTGGGAGTTGCTGTTGAAGTC
Gclc	Glutamate-cysteine ligase, catalytic subunit	AGCATCAGGCTCTCTGCACC	TTCTCCTCTCCGATGCCGG
Gnmt	Glycine N-methyltransferase	GCCAGACTGCAAAGGTGACCA	GTCGTAATGTCCTTGGTCAGGTCA
Got1	Glutamate oxaloacetate transaminase 1, soluble	GAGCTGTGCTTCTCGCCTAG	TCCCAGGTTGGTGATGATACGTAG
Gss	Glutathione synthetase	CCTATGCTGTGCAGATGGACTTC	CAAAGAGACGGGCAGTATAGTCG
Hprt	Hypoxanthine guanine phosphoribosyl transferase	GTCGTGATTAGCGATGATGAACC	GTCTTTCAGTCCTGTCCATAATCAG

Table S3 continued

Symbol	Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')
Mat1a	Methionine adenosyltransferase I, alpha	GTGGCCTGTGAGACAGTGTGC	TGCTCTCACCACCCGCTGG
Mat2a	Methionine adenosyltransferase II, alpha	AAGTGGCTTGTGAAACTGTTGCT	CTGGGCAATATCTGGTGACTGTTG
Mthfr	5,10- methylenetetrahydrofolate reductase	GACATCTGTGTGGCAGGTTACCC	CTGAAGAAGGTGCTGGCCTC
Mtr	5- methyltetrahydrofolate- homocysteine methyltransferase	GCTGGTGGACTACATTGACTGGA	TTCTGGCTTCTTCACCTACTGC
Pemt	Phosphatidylethanolam ine N- methyltransferase	CTGGAATGTGGTAGCGAGATGG	CAGTGGGAGCGGAGGATGTTCC
Ppara	Peroxisome proliferator activated receptor α	CCAGTACTTAGGAAGCTGTCCG	TATTCGACACTCGATGTTTCAGGG
Shmt1	Serine hydroxymethyltransferase 1 (soluble)	CTGCGGAAGATTGCGGATGAT	GTCTTGGGATCCACACTGCGC
Shmt2	Serine hydroxymethyltransferase 2 (mitochondrial)	CCTATGCCCGCCTCATTGACT	TTCCGGTAGAAGATGAGCCCTG
Ucp2	Uncoupling protein 2	GCAGATCCAAGGGGAGAGTCAA	CCGGCGACCAGCCCATTG