

Table S2: Genes measured using real time PCR

Symbol	Gene Name	Forward Primer (5' to 3')
		Reverse Primer (5' to 3')
Genes measured in sheep		
PCK1	Phosphoenolpyruvate Carboxykinase 1	TGTCCGAGGAGGATTTTGAG
		ATGCCAATCTTGGACAGAGG
G6PC	glucose 6-phosphatase	GGATTCTGGATCGTGCAACT
		ATCCAATGGCGAAACTGAAC
PGC1A	Peroxisome proliferator-activated receptor	GTGACTCTGGGGTCAGAGGA
		CACCAAACCCACAGAGAACC
LDHA	lactate dehydrogenase-A	CATGGCCTGTGCCATCAGTA
		GGAAAAGGCTGCCATGTTGG
CPT1A	carnitine palmitoyltransferase 1A	GAAGCCTCTGCTGGATGACA
		CGACCAGCTGCTCATGTAGT
S15	Ribosomal Protein S15	ATCATTCTGCCCAGATGGTG
		CGGGCCGGCCATGCTTTACG
OCT1	organic cation uptake transporter 1 (SLC22A1)	CATCCTCGTCACCATCGACC
		TTCGGCCGACACAAGCTATT
OCT2	organic cation uptake transporter 2 (SLC22A2)	CATGGCCATCTCCCCAAACT
		CTCCGGTATCTCAGCCCAAC
OCT3	organic cation uptake transporter 3 (SLC22A3)	CCCTTTGCAGCAAGCAATGT
		GGGTAGCAACAGTGGTCCTC
MATE1	Multidrug and toxin extrusion protein 1 (SLC47A1)	GTTACTGGTGTCTCGGTGGG
		CGCCCACATGCTTCTTGTTT
MATE2	Multidrug and toxin extrusion protein 2 (SLC47A2)	TTCCAGCTGTTTGATGCCCT
		CATGACAGCATTACCCACGG
Genes measured in macaques		
S15	Ribosomal Protein S15	GACCAGAGCGGTCTTTTCTGA
		CGGAAGGTCCGCTTCTTCTT
G6P	glucose 6-phosphatase	GGCTGTGCAGCTGAACGTCTGT
		TGCTGTGGATGTGGCTGAAAGTT
LDHA	lactate dehydrogenase-A	CCAACATGGCAGCCTTTTCC
		TCTCCCTCTTGTTGACGTGC
PEPCK	Phosphoenolpyruvate Carboxykinase 1	TCATGACGCGGATGGGCACG
		CGTCAGCTCCGGGTTGCAGG
FGF21	Fibroblast growth factor 21	AGATTCTGTGCCAGAAGCC
		TTCTCAAGAAGCAGCTCCCG
GDF15	Growth/differentiation factor 15	AAACACCGACCTCATCCAGG
		GGAAATACGCAGGTGCAGGT
IGF2	Insulin Like Growth Factor 2	GACACCCTCCAGTTCGTCTG
		GGAAACAGCACTCCTCAACG
OCT1	organic cation uptake transporter 1 (SLC22A1)	TGAAAAGCTGAGCCCTTCGT

		AGCCCCTGATAGAGCACAGA
<i>OCT2</i>	organic cation uptake transporter 2 (SLC22A2)	CTTACGCCCTTCCTCACTGG
		TTCTGGGAGATCAGCCACCT
<i>OCT3</i>	organic cation uptake transporter 3 (SLC22A3)	TTAGGCTATGCAGCGGACAG
		GCAGGAAGCGGAAGATCACA
<i>MATE1</i>	Multidrug and toxin extrusion protein 1 (SLC47A1)	GTGTCCAGGCTTACCCAGAC
		TACGATCTGGGGCAGGAGAA
<i>MATE2</i>	Multidrug and toxin extrusion protein 2 (SLC47A2)	CTTTCACGTGTTTGAGGCCG
		CCAGTGGTAGGCCGATGATG
<i>PGC1A</i>	Peroxisome proliferator-activated receptor	GGACTCAAGTGGTGCAGTGA
		CTGCTAGCAAGTTTGCCTCA