

Table SI. Primer sequences used for quantitative PCR.

Gene	Primer sequence (5' to 3')	
	Forward	Reverse
Cyp7a1	GTGATGTTTGAAGCCGGATATC	TTTATGTGCGGTCTTGAACAAG
Hsd3b7	GCGCTTTGGAGGTCGTCTAT	CGAAGACCACAGGGACTCAG
Akr1d1	ACGCTAAAGGCCCTCAAAC	CAGCTGCCTGCGGTAAAAT
Cyp27a1	ACAGGAGGGCAAGTACCCAA	ACCTGGTCCCCTGATTCACT
Cyp39a1	TCTCGGTTGAAGAATTTGCTTG	TCACTAACAAAGGTCATTCCGGT
Hsd17b4	ATTTCAAATGCGTACGTGGATC	TCGTGATATGCCATTCAAACAC
Ldlr	CAGAAGTCGACACTGTACTGAC	AAGATGGACAGGAACCTCATAAC
Trib3	AAGATGCCTGCGTGATGACT	CGTGGAAATGGGTATCTGCCA
Fgf15	GACTGCGAGGAGGACCAAAA	CAGCCCGTATATCTTGCCGT
Fgfr4	CGTACACAATCTTACGTTGCTT	CAGCGGAATTTGACAGTATTCC
Klb	GAAATCCGCGTGTTTGGTTATA	GAAGCCGTTGTCTTGTATGATC
Hmgsc1	TGGTTCCTGGCTTCTGTCCTG	GATCCTGGTGTGGCGTCTTGTG
Hmgcr	TGATGGGAGCTTGCTGTGAG	TAGTGCTGGCCACAAGACAG
Mvk	CTGAAGTCAATCAACAAGTGGG	CTCTTCAAGGAAGACATCGTCC
Mvd	GACAAGAAGCAGACGGGCAGTAC	CGCTCAGGCACAACAGACTCAG
Idi1	ATTGAAGTACAGCTCTCCGCACAG	CACATCTCCGCTAGAAGCTGAACC
Fdps	GGATGCCATCAACGACGCTCTG	CTCCAGCAGGTTCAAGTAGTAGGG
Fdft1	GCAAGGAGAAGGACCGACAA	GTCCCAGTCTCTGTTTGGAGG
Sqle	GTGCAGAAAAGAAATCGGTCTT	TGTCGGGCTCTTTTAAATCTCT
Osc	GTCGGCAGAGATGGACTTATTA	GCTTTTGGTAAGTCCGTGAAAT
Dhcr7	TGCTGCTTTATTCCTGGCTTCCTG	GCTGGAGTAATGGCACCTTCTTGG
Cyp51a1	CGCAGGCTGTCAAAGAACC	CCTCATCTGTTAGAGGACGCC
Gapdh	GCATCCACTGGTGCTGCC	TCATCATACTTGGCAGGTTTC

Cyp7/27/39a1, cytochrome P450 family 7/27/39 subfamily A member 1; Hsd3b7, hydroxy- $\delta$ -5-steroid dehydrogenase, 3  $\beta$ - and steroid  $\delta$ -isomerase 7; Akrl1d1, aldo-keto reductase family 1 member D1; Hsd17b4, hydroxysteroid 17-b dehydrogenase 4; Ldlr, low density lipoprotein receptor; Trib3, tribbles pseudokinase 3; Fgf15, fibroblast growth factor 15; Fgfr4, FGF receptor 4; Klb, Klotho  $\beta$ ; Hmgsc1, 3-hydroxy-3-methylglutaryl-CoA synthase 1; Hmgcr, 3-hydroxy-3-methylglutaryl-CoA reductase; Mvk, mevalonate kinase; Mvd, mevalonate diphosphate decarboxylase; Idi1, isopentenyl-diphosphate  $\delta$  isomerase 1; Fdps, farnesyl diphosphate synthase; Fdft1, farnesyl diphosphate farnesyltransferase 1; Sqle, squalene epoxidase; Osc, oxidosqualene-lanosterol cyclase; Dhcr7, 7-dehydrocholesterol reductase.