

Supplemental table S1a. List of the studied liver-specific genes in PHHs using SYBR green-based real-time quantitative PCR (QPCR). GAPDH was used as the endogenous control gene.

Gene symbol	Gene name	Forward primer 5'-3'	Reverse primer 5'-3'
<i>FOXA2</i>	Forkhead box A2	AAGACCTACAGGCGCAGCT	CATCTTGTGGGGCTCTGC
<i>AFP</i>	Alpha fetoprotein	CGCTGCAAACGATGAAGCAG	AATCTGCAATGACAGCCTCAAG
<i>ALB</i>	Albumin	GAAAAGTGGGCAGCAAATGT	GGTTCAGGACCACGGATAGA
<i>GAPDH</i>	Glyceraldehyde-3-phosphate dehydrogenase	AGCCACATCGCTCAGACACC	GTACTCAGCGCCAGCATCG

Supplemental table S1b. List of the studied genes related to the lipids, fatty acids, as well as glucose metabolism in cultured primary human hepatocytes using TaqMan-based real-time quantitative PCR (qPCR) assays. Both GAPDH and B2M were used as the endogenous controls.

Gene symbol	Gene name	TaqMan assay ID
<i>FASN</i>	Fatty acid synthase	Hs01005622_m1
<i>SCD</i>	Stearoyl-CoA desaturase	Hs01682761_m1
<i>FADS1</i>	Fatty Acid Desaturase 1	Hs01096545_m1
<i>FADS2</i>	Fatty Acid Desaturase 2	Hs00927433_m1
<i>ELOVL1</i>	Elongation of very-long chain fatty acids 1	Hs00967951_g1
<i>ELOVL2</i>	Elongation of very-long chain fatty acids 2	Hs00214936_m1
<i>ELOVL3</i>	Elongation of very-long chain fatty acids 3	Hs00537016_m1
<i>ELOVL5</i>	Elongation of very-long chain fatty acids 5	Hs01094711_m1
<i>ELOVL6</i>	Elongation of very-long chain fatty acids 6	Hs00907565_m1
<i>ELOVL7</i>	Elongation of very-long chain fatty acids 7	HS00405151_m1
<i>GCK</i>	Glucokinase	Hs01564555_m1
<i>PKLR</i>	Liver-type pyruvate kinase	Hs00176075_m1
<i>PCK1</i>	Phosphoenolpyruvate carboxykinase	Hs00159918_m1
<i>CERS1</i>	Ceramide synthase 1	Hs04195319_s1
<i>CERS2</i>	Ceramide synthase 2	Hs00371958_g1
<i>CERS4</i>	Ceramide synthase 4	Hs00226114_m1
<i>CERS5</i>	Ceramide synthase 5	Hs00908759_m1
<i>CERS6</i>	Ceramide synthase 6	Hs00826756_m1
<i>SGMS1</i>	Sphingomyelin synthase 1	Hs00983630_m1
<i>SGMS2</i>	Sphingomyelin synthase 2	Hs00380453_m1
<i>UGCG</i>	UDP-glucose ceramide glucosyltransferase	Hs00234293_m1
<i>SMPD1</i>	Sphingomyelin phosphodiesterase 1	Hs03679347_g1
<i>ASAHI</i>	N-acylsphingosine amidohydrolase (acid ceramidase) 1	Hs00602774_m1
<i>ASA2</i>	N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2	Hs01025305_m1
<i>B2M</i>	Beta-2-microglobulin	Hs99999907_m1
<i>GAPDH</i>	Glyceraldehyde-3-phosphate dehydrogenase	Hs99999905_m1