

Supplementary Table 5: Biological pathways including genes that exhibit differential up-regulated mRNA expression ($q < 0.05$) after palmitate treatment in human pancreatic islets.

Pathway (total number of genes in the pathway)	Observed number of genes	Expected number of genes	Ratio Observed/expected	Raw P-value	Adjusted P-value
Ribosome (81)	33	2.55	12.96	1.43×10^{-28}	1.34×10^{-26}
Aminoacyl-tRNA biosynthesis (40)	7	1.26	5.57	0.0002	0.0094
PPAR signaling pathway (67)	8	2.11	3.80	0.0012	0.0305
Amino sugar and nucleotide sugar metabolism (43)	6	1.35	4.44	0.0021	0.0329
Pathway	Observed genes				
Ribosome	<i>RPS20, RPS8, RPS2, RPS5, RPL30, RPL11, RPS17, RPL18, RPL10, RPL17, RPS11, RPL27, RPS18, RPL29, RPL35, RPS25, RPL36AL, RPS10, RPL38, RPL8, RPL41, RPS27, RPL18A, RPL10A, RPS9, RPLP0, RPL35A, RPL12, RPS15A, RPS7, RPS19, RPL24, FAU</i>				
Aminoacyl-tRNA biosynthesis	<i>CARS, MARS, GARS, IARS, YARS, AARS, WARS</i>				
PPAR signaling pathway	<i>FABP3, FADS2, SCD, ACSL1, SLC27A2, ANGPTL4, UBC, PCK1</i>				
Amino sugar and nucleotide sugar metabolism	<i>GMPPB, NANS, PMM2, HEXA, NAGK, PGM3</i>				