

Table S1. List of genes identified in the pathways positively and negatively associated with *HMGCR* in adipose tissue.

	Negatively Associated Genes	Positively Associated Genes
Insulin Signalling Pathways	<i>PPP1CA, PHKA2, FLOT1, EXOC7, HK1, PRKAB1, G6PC3, PCK2, MTOR, RPS6KB2, RPS6, EIF4EBP1, EIF4E2, BAD, SHC2, HRAS, ARAF, MAP2K2</i>	<i>PIK3R1, PIK3CA, PIK3CB, PDPK1, AKT2, GSK3B, PPP1R3C, PPP1R3B, PHKA1, PDE3B, PRKACB, PRKAR2B, PRKCI, SH2B2, CBL, CBLB, CRK, CRKL, RAPGEF1, RHOQ, PRKAA2, PRKAB2, FOXO1, SHC3, SOS1, SOS2, KRAS, BRAF, MAP2K1, ELK1, SOCS3, PTPN1, MAPK8, MAPK10, MAPK9</i>
Insulin Resistance	<i>PPP1CA, MTOR, RPS6KB2, NFKBIA, RELA, PRKAB1, SLC27A4, SLC27A5, TRIB3, PCK2, G6PC3, NR1H3, MLXIPL, SLC2A1, CREB3</i>	<i>RPS6KA3, PPP1R3C, PPP1R3B, PTPN1, PTPN11, PIK3CA, PIK3CB, PIK3R1, AKT2, IL6, STAT3, SOCS3, GSK3B, TNF, TNFRSF1A, MAPK8, MAPK10, MAPK9, TBC1D4, PRKAA2, PRKAB2, CD36, FOXO1, PRKCE, PDPK1, OGT, GFPT2, GFPT1, CREB3L2</i>
Adipocytokine Signalling	<i>TRADD, TRAF2, MTOR, NFKBIA, NFKBIB, RELA, POMC, PRKAB1, PCK2, G6PC3, RXRA, SLC2A1</i>	<i>TNF, TNFRSF1A, MAPK8, MAPK10, MAPK9, SOCS3, AKT2, CD36, ACSL3, STAT3, PRKAA2, PRKAB2, PTPN11, ADIPOQ, ADIPOR2</i>