

Supplementary Table S4 Tissue-specific eQTL analysis for the polymorphisms of GSS and GGT7 genes

Gene	Effect allele	SNP ID	Whole blood ¹		Pancreas ²		Adipose tissue (visceral) ²		Skeletal muscle ²		Liver ²	
			<i>Q</i>	<i>Z</i>	<i>P</i>	<i>NES</i>	<i>P</i>	<i>NES</i>	<i>P</i>	<i>NES</i>	<i>P</i>	<i>NES</i>
GSS	A	rs1304179 2	-	-	-	-	-	-	-	-	0.009*	0.87 ^β
TRPC4AP	A	rs1304179 2	<0.0001	-58.8	-	-	0.00032	-0.13	-	-	1.1×10⁻⁵	-0.30
EDEM2	A	rs1304179 2	<0.0001	-36.9	1.3×10⁻¹⁸	0.48	6×10⁻⁶	-0.16	1.2×10⁻¹⁴	-0.19	-	-
MAP1LC3 A	A	rs1304179 2	<0.0001	13.0	-	-	9.9×10⁻¹⁴	0.25	-	-	-	-
MYH7B	A	rs1304179 2	<0.0001	12.7	4.4×10⁻⁸	0.31	6.3×10⁻⁸	0.21	-	-	4.5×10⁻⁵	0.17
UQCC1	A	rs1304179 2	<0.0001	-12.2	-	-	-	-	-	-	-	-
CPNE1	A	rs1304179 2	<0.0001	-11.6	-	-	-	-	-	-	-	-
GGT7	A	rs1304179 2	<0.0001	-10.7	-	-	0.006*	-5.16 ^z	7.5×10⁻¹⁰	0.23	-	-
EIF2S2	A	rs1304179 2	<0.0001	9.8	-	-	-	-	-	-	-	-
ITCH	A	rs1304179 2	<0.0001	9.3	-	-	-	-	-	-	-	-
PROCR	A	rs1304179 2	-	-	2.8×10⁻¹⁰	0.61	-	-	2.5×10⁻¹²	-0.27	1.1×10⁻⁶	0.36
NFS1	A	rs1304179 2	-	-	-	-	-	-	0.0003	0.11	-	-
GSS	A	rs1801310	-	-	-	-	-	-	5.6×10⁻¹¹	0.20	-	-
GGT7	A	rs1801310	<0.0001	24.9	-	-	0.00025	0.092	2.2×10⁻²⁰	-0.28	-	-
TRPC4AP	A	rs1801310	<0.0001	-24.9	-	-	-	-	-	-	-	-
UQCC1	A	rs1801310	<0.0001	19.7	-	-	-	-	-	-	-	-
EIF6	A	rs1801310	<0.0001	-12.5	-	-	-	-	-	-	-	-
MAP1LC3 A	A	rs1801310	<0.0001	12.3	-	-	3.3×10⁻⁸	-0.16	1.8×10⁻⁷	-0.15	-	-
PROCR	A	rs1801310	<0.0001	11.6	2.4×10⁻⁶	-0.37	-	-	-	-	-	-

NCOA6	A	rs1801310	<0.0001	-11.0	-	-	-	-	5.1×10 ⁻⁵	-0.096	0.0001*	-0.16 ^β
ITCH	A	rs1801310	<0.0001	-10.8	-	-	-	-	-	-	-	-
MYH7B	A	rs1801310	<0.0001	-10.0	-	-	-	-	-	-	-	-
ACSS2	A	rs1801310	-	-	-	-	0.0007*	3.97 ^z	1.2×10 ⁻⁶	-0.12	-	-
PIGU	A	rs1801310	-	-	-	-	-	-	5.9×10 ⁻⁵	-0.1	-	-
NFS1	A	rs1801310	-	-	-	-	-	-	0.00011	-0.092	-	-
EDEM2	A	rs1801310	-	-	1.5×10 ⁻⁶	-0.22	-	-	-	-	-	-
MMP24-AS1	A	rs1801310	-	-	9.7×10 ⁻⁵	-0.21	-	-	-	-	-	-
GSS	T	rs6088660	0.002	5.0	-	-	-	-	1.4×10 ⁻¹⁰	0.21	-	-
TRPC4AP	T	rs6088660	<0.0001	64.2	-	-	-	-	-	-	-	-
MAP1LC3A	T	rs6088660	<0.0001	-27.4	-	-	-	-	-	-	-	-
EDEM2	T	rs6088660	<0.0001	18.7	-	-	2.6×10 ⁻⁵	0.13	-	-	-	-
NCOA6	T	rs6088660	<0.0001	12.8	-	-	-	-	0.00022	0.091	-	-
EIF6	T	rs6088660	<0.0001	-12.2	-	-	-	-	-	-	-	-
TP53INP2	T	rs6088660	<0.0001	-10.7	-	-	-	-	-	-	-	-
GGT7	T	rs6088660	<0.0001	-10.6	-	-	-	-	1.2×10 ⁻⁶	0.15	-	-
MYH7B	T	rs6088660	<0.0001	-6.4	-	-	-	-	-	-	-	-
ACSS2	T	rs6088660	-	-	-	-	-	-	-	-	2.5×10 ^{-6*}	-4.71 ^z
GGT7	T	rs6119534	<0.0001	-17.7	-	-	7.3×10 ^{-6*}	-4.48 ^z	8.7×10 ⁻³⁸	0.37	3.2×10 ⁻³⁹	-13.10 ^z
MAP1LC3A	T	rs6119534	<0.0001	21.6	-	-	1.7×10 ⁻²⁴	0.27	1.5×10 ⁻⁷	0.15	9.2×10 ⁻⁷	0.21
EDEM2	T	rs6119534	<0.0001	-18.9	6.1×10 ⁻⁸	0.25	-	-	2.3×10 ⁻⁵	-0.085	-	-
ITCH	T	rs6119534	<0.0001	14.7	-	-	-	-	-	-	-	-
EIF2S2	T	rs6119534	<0.0001	13.6	-	-	-	-	-	-	-	-
UQCCL1	T	rs6119534	<0.0001	-10.5	-	-	-	-	-	-	-	-

<i>PROCR</i>	T	rs6119534	<0.0001	-9.1	2.7×10⁻⁵	0.34	-	-	1.5×10⁻⁵	-0.14	-	-
<i>MYH7B</i>	T	rs6119534	<0.0001	7.8	4.3×10⁻⁵	0.19	-	-	-	-	-	-
<i>ACSS2</i>	T	rs6119534	-	-	-	-	-	-	1.5×10⁻⁸	0.14	6.0×10^{-8*}	-5.41 ^z
<i>GSS</i>	T	rs6119534	-	-	-	-	-	-	0.0002	0.12	-	-
<i>TRPC4AP</i>	T	rs6119534	-	-	-	-	-	-			3.4×10^{-7*}	-0.33 ^β
<i>GGT7</i>	A	rs1154615 5	-	-	-	-	0.0001	-0.13	-	-	1.2×10^{-6*}	4.85 ^z
<i>MAP1LC3A</i>	A	rs1154615 5	<0.0001	-47.7	-	-	1.6×10⁻⁵	-0.16	-	-	-	-
<i>TRPC4AP</i>	A	rs1154615 5	<0.0001	22.2	-	-			-	-	-	-
<i>NCOA6</i>	A	rs1154615 5	<0.0001	16.9	-	-	3.9×10⁻⁸	0.26	-	-	-	-
<i>TP53INP2</i>	A	rs1154615 5	<0.0001	-15.0	-	-	-	-	-	-	-	-
<i>EDEM2</i>	A	rs1154615 5	<0.0001	10.6	-	-	-	-	-	-	-	-
<i>EIF6</i>	A	rs1154615 5	<0.0001	-8.6	-	-	-	-	-	-	-	-
<i>ITCH</i>	A	rs1154615 5	<0.0001	-7.8	-	-	-	-	-	-	-	-
<i>GSS</i>	A	rs1154615 5	0.0007	5.2	-	-	-	-	0.00001	0.16	-	-
<i>PIGU</i>	A	rs1154615 5	-	-	-	-	-	-	0.00001	0.16	-	-

¹ Q-value (false discovery rate) and Z-score statistics for SNP's eQTLs in whole blood obtained from the eQTLGen database (<https://www.eqtlgen.org>).

² P-value and NES (normalized effect size) statistics for SNP's eQTLs in T2D-related tissues obtained from the GTEx portal (<https://gtexportal.org>).

* Statistics for SNP's eQTLs obtained from the QTLbase database (<http://mulinlab.tmu.edu.cn/qtlbase/index.html>); P-value and Z-score or *beta* estimate.