

Table S5 Pathway annotation of 22 genes

Gene_name	Path_name
<i>ACSM2A</i>	Metabolic pathways
<i>ACSM2A</i>	Butanoate metabolism
<i>APOB</i>	Vitamin digestion and absorption
<i>APOB</i>	Fat digestion and absorption
<i>CXCL14</i>	Chemokine signaling pathway
<i>CXCL14</i>	Cytokine-cytokine receptor interaction
<i>F5</i>	Complement and coagulation cascades
<i>FTCD</i>	Metabolic pathways
<i>FTCD</i>	One carbon pool by folate
<i>FTCD</i>	Histidine metabolism
<i>GNAI1</i>	Chemokine signaling pathway
<i>GNAI1</i>	Cocaine addiction
<i>GNAI1</i>	Regulation of lipolysis in adipocytes
<i>GNAI1</i>	Long-term depression
<i>GNAI1</i>	Renin secretion
<i>GNAI1</i>	Gastric acid secretion
<i>GNAI1</i>	Pertussis
<i>GNAI1</i>	Progesterone-mediated oocyte maturation
<i>GNAI1</i>	Gap junction
<i>GNAI1</i>	GABAergic synapse
<i>GNAI1</i>	Morphine addiction
<i>GNAI1</i>	Circadian entrainment
<i>GNAI1</i>	Estrogen signaling pathway
<i>GNAI1</i>	Melanogenesis
<i>GNAI1</i>	Retrograde endocannabinoid signaling
<i>GNAI1</i>	Chagas disease (American trypanosomiasis)
<i>GNAI1</i>	Cholinergic synapse
<i>GNAI1</i>	Serotonergic synapse
<i>GNAI1</i>	Glutamatergic synapse
<i>GNAI1</i>	Leukocyte transendothelial migration
<i>GNAI1</i>	Toxoplasmosis
<i>GNAI1</i>	Sphingolipid signaling pathway
<i>GNAI1</i>	Axon guidance
<i>GNAI1</i>	Dopaminergic synapse
<i>GNAI1</i>	Platelet activation
<i>GNAI1</i>	Tight junction
<i>GNAI1</i>	Parkinson's disease
<i>GNAI1</i>	Adrenergic signaling in cardiomyocytes
<i>GNAI1</i>	Oxytocin signaling pathway
<i>GNAI1</i>	cGMP-PKG signaling pathway
<i>GNAI1</i>	Alcoholism
<i>GNAI1</i>	cAMP signaling pathway

Table S5 (continued)**Table S5** (continued)

Gene_name	Path_name
<i>GNAI1</i>	Rap1 signaling pathway
<i>GNAI1</i>	Pathways in cancer
<i>HPSE</i>	Metabolic pathways
<i>HPSE</i>	Glycosaminoglycan degradation
<i>HPSE</i>	Proteoglycans in cancer
<i>PARVA</i>	Focal adhesion
<i>PLG</i>	Complement and coagulation cascades
<i>PLG</i>	Staphylococcus aureus infection
<i>PLG</i>	Influenza A
<i>PLG</i>	Neuroactive ligand-receptor interaction
<i>SERPINA1</i>	Complement and coagulation cascades
<i>SGCD</i>	Viral myocarditis
<i>SGCD</i>	Arrhythmogenic right ventricular cardiomyopathy (ARVC)
<i>SGCD</i>	Hypertrophic cardiomyopathy (HCM)
<i>SGCD</i>	Dilated cardiomyopathy
<i>UPB1</i>	Metabolic pathways
<i>UPB1</i>	Pantothenate and CoA biosynthesis
<i>UPB1</i>	beta-Alanine metabolism
<i>UPB1</i>	Drug metabolism — other enzymes
<i>UPB1</i>	Pyrimidine metabolism