Supplementary Table 1: The list of genes associated with platelet count retrieved from the Open Target Genetics platform (https://genetics.opentargets.org)

Gene	
symbol	Gene name
GCSAML	germinal center associated signaling and motility like
SH2B3	SH2B adaptor protein 3
ARHGEF3	Rho guanine nucleotide exchange factor 3
HBS1L	HBS1 like translational GTPase
THPO	thrombopoietin
JAK2	Janus kinase 2
BAK1	BCL2 antagonist/killer 1
RCL1	RNA terminal phosphate cyclase like 1
TUBB1	tubulin beta 1 class VI
DNM3	dynamin 3
GCKR	glucokinase regulator
ABCC4	ATP binding cassette subfamily C member 4
JMJD1C	jumonji domain containing 1C
HIC1	HIC ZBTB transcriptional repressor 1
CARMIL1	capping protein regulator and myosin 1 linker 1
LY75	lymphocyte antigen 75
CBL	Cbl proto-oncogene
SLFN14	schlafen family member 14
RASSF3	Ras association domain family member 3
ZFPM2	zinc finger protein, FOG family member 2
CABLES1	Cdk5 and Abl enzyme substrate 1
LY75-CD302	LY75-CD302 readthrough
ACTN1	actinin alpha 1
MARK4	microtubule affinity regulating kinase 4
AK3	adenylate kinase 3
RCOR1	REST corepressor 1
CD36	CD36 molecule
FABP6	fatty acid binding protein 6
GP1BA	glycoprotein Ib platelet subunit alpha
	novel pleckstrin homology domain containing, family O member 2
	(PLEKHO2) and ankyrin repeat and death domain containing 1A
AC069368.1	(ANKDD1A) protein
ATXN2	ataxin 2
TRABD	TraB domain containing
TPM4	tropomyosin 4
GFI1B	growth factor independent 1B transcriptional repressor
TERT	telomerase reverse transcriptase
EGF	epidermal growth factor

NREP neuronal regeneration related protein

CHRNE cholinergic receptor nicotinic epsilon subunit PNPLA3 patatin like phospholipase domain containing 3

PLEC plectin

TAOK1 TAO kinase 1

CDKN2A cyclin dependent kinase inhibitor 2A

EHD3 EH domain containing 3 TRIM58 tripartite motif containing 58

ZBTB16 zinc finger and BTB domain containing 16

FAR2 fatty acyl-CoA reductase 2

EXOC3L4 exocyst complex component 3 like 4

GSE1 Gse1 coiled-coil protein RAD51B RAD51 paralog B

ZFPM1 zinc finger protein, FOG family member 1

POLR2H RNA polymerase II subunit H

TPM1 tropomyosin 1

NDFIP1 Nedd4 family interacting protein 1

PDIA5 protein disulfide isomerase family A member 5

NINJ2 ninjurin 2

MAP1A microtubule associated protein 1A ZFP36L2 ZFP36 ring finger protein like 2

7-Mar membrane associated ring-CH-type finger 7

APOH apolipoprotein H

CPS1 carbamoyl-phosphate synthase 1
TBC1D14 TBC1 domain family member 14
CCDC71L coiled-coil domain containing 71 like

WASL WASP like actin nucleation promoting factor

BRF1 RNA polymerase III transcription initiation factor subunit

S1PR3 sphingosine-1-phosphate receptor 3 SNHG32 small nucleolar RNA host gene 32

PHETA1 PH domain containing endocytic trafficking adaptor 1

TECPR2 tectonin beta-propeller repeat containing 2

TMEM120B transmembrane protein 120B RHCE Rh blood group CcEe antigens APOBR apolipoprotein B receptor

ODF3 outer dense fiber of sperm tails 3

BCL2L1 BCL2 like 1

SPINT2 serine peptidase inhibitor, Kunitz type 2

ST5 suppression of tumorigenicity 5

C11orf65 chromosome 11 open reading frame 65

VSTM4 V-set and transmembrane domain containing 4

REEP3 receptor accessory protein 3 ERG ETS transcription factor ERG FADS1 fatty acid desaturase 1

LHFPL2 LHFPL tetraspan subfamily member 2

RNPEPL1 arginyl aminopeptidase like 1

GRTP1 growth hormone regulated TBC protein 1

RHOF ras homolog family member F, filopodia associated

BUD13 BUD13 homolog

USP30 ubiquitin specific peptidase 30

ETS1 ETS proto-oncogene 1, transcription factor

ZSWIM6 zinc finger SWIM-type containing 6

CAPZA1 capping actin protein of muscle Z-line subunit alpha 1 KCTD20 potassium channel tetramerization domain containing 20 NAA25 N(alpha)-acetyltransferase 25, NatB auxiliary subunit

SLC25A11 solute carrier family 25 member 11

ATP13A1 ATPase 13A1

MYLK2 myosin light chain kinase 2

PACSIN2 protein kinase C and casein kinase substrate in neurons 2

BRAP BRCA1 associated protein

PLOD1 procollagen-lysine,2-oxoglutarate 5-dioxygenase 1

FRYL FRY like transcription coactivator

MOV10L1 Mov10 like RISC complex RNA helicase 1
TESK2 testis associated actin remodelling kinase 2
SMG6 SMG6 nonsense mediated mRNA decay factor

TP53BP1 tumor protein p53 binding protein 1

UHRF1BP1 UHRF1 binding protein 1 HDAC7 histone deacetylase 7

HSD17B6 hydroxysteroid 17-beta dehydrogenase 6

AP2B1 adaptor related protein complex 2 subunit beta 1

ITGA2B integrin subunit alpha 2b

PTPRC protein tyrosine phosphatase receptor type C

GNA12 G protein subunit alpha 12

CDKN2B cyclin dependent kinase inhibitor 2B

TMEM116 transmembrane protein 116 MECOM MDS1 and EVI1 complex locus

COPZ1 coatomer protein complex subunit zeta 1

TSC22D4 TSC22 domain family member 4
TINF2 TERF1 interacting nuclear factor 2

CD9 CD9 molecule

DLK1 delta like non-canonical Notch ligand 1

PPARG peroxisome proliferator activated receptor gamma

ZNF444 zinc finger protein 444

PURB purine rich element binding protein B

RALB RAS like proto-oncogene B

HEMGN hemogen

SETBP1 SET binding protein 1 DDO D-aspartate oxidase SATB1 SATB homeobox 1

GSTA1 glutathione S-transferase alpha 1

TMCC2 transmembrane and coiled-coil domain family 2

ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-

ABO galactosyltransferase

SIPA1 signal-induced proliferation-associated 1 FLI1 Fli-1 proto-oncogene, ETS transcription factor

DOCK8 dedicator of cytokinesis 8 IRS2 insulin receptor substrate 2

ABHD6 abhydrolase domain containing 6

TYK2 tyrosine kinase 2

ARVCF delta catenin family member REST RE1 silencing transcription factor

TFR2 transferrin receptor 2

ZC3HC1 zinc finger C3HC-type containing 1

PEAR1 platelet endothelial aggregation receptor 1

CYP26A1 cytochrome P450 family 26 subfamily A member 1

NRF1 nuclear respiratory factor 1 HFE homeostatic iron regulator

KIAA0232 KIAA0232

MPHOSPH9 M-phase phosphoprotein 9

CAPZA2 capping actin protein of muscle Z-line subunit alpha 2

RAB11FIP3 RAB11 family interacting protein 3 GP1BB glycoprotein Ib platelet subunit beta

AP1M2 adaptor related protein complex 1 subunit mu 2

MAST4 microtubule associated serine/threonine kinase family member 4

AC090517.4 zinc finger protein 280D

FAM160A1 family with sequence similarity 160 member A1

IGF1R insulin like growth factor 1 receptor

ALDH2 aldehyde dehydrogenase 2 family member

CUX2 cut like homeobox 2

CASS4 Cas scaffold protein family member 4

MICB MHC class I polypeptide-related sequence B

SIRPA signal regulatory protein alpha SLC22A5 solute carrier family 22 member 5 GPATCH8 G-patch domain containing 8

ZNF367 zinc finger protein 367 NUAK2 NUAK family kinase 2

CD164 CD164 molecule

QKI QKI, KH domain containing RNA binding

PDYN prodynorphin

TNFRSF13B TNF receptor superfamily member 13B SLC35D2 solute carrier family 35 member D2

ABCC5 ATP binding cassette subfamily C member 5

MYO9B myosin IXB

BET1L Bet1 golgi vesicular membrane trafficking protein like

ARHGAP25 Rho GTPase activating protein 25 TBC1D22B TBC1 domain family member 22B

IFITM2 interferon induced transmembrane protein 2

MEF2C myocyte enhancer factor 2C

SHB SH2 domain containing adaptor protein B NLRP3 NLR family pyrin domain containing 3

PTPN11 protein tyrosine phosphatase non-receptor type 11

BCL2L11 BCL2 like 11

ZNF839 zinc finger protein 839 IRS1 insulin receptor substrate 1

EXD2 exonuclease 3'-5' domain containing 2

PIEZO1 piezo type mechanosensitive ion channel component 1

PTPRH protein tyrosine phosphatase receptor type H LINC02694 long intergenic non-protein coding RNA 2694

SPATA18 spermatogenesis associated 18

MN1 proto-oncogene, transcriptional regulator

INHBE inhibin subunit beta E

HGFAC HGF activator

AKAP10 A-kinase anchoring protein 10

IQGAP2 IQ motif containing GTPase activating protein 2

KLHL1 kelch like family member 1 PLCB1 phospholipase C beta 1

PAK2 p21 (RAC1) activated kinase 2

RNF145 ring finger protein 145

MEF2D myocyte enhancer factor 2D

RGS12 regulator of G protein signaling 12
DIP2B disco interacting protein 2 homolog B
RUNX1 RUNX family transcription factor 1

PAQR8 progestin and adipoQ receptor family member 8

EFHC1 EF-hand domain containing 1

RAPSN receptor associated protein of the synapse GET1 guided entry of tail-anchored proteins factor 1

PRL prolactin

PSORS1C1 psoriasis susceptibility 1 candidate 1

BCL2 apoptosis regulator

ADGRF2 adhesion G protein-coupled receptor F2 LAPTM5 lysosomal protein transmembrane 5

WDR66 WD repeat domain 66

THADA THADA armadillo repeat containing

APOC3 apolipoprotein C3

ITPK1 inositol-tetrakisphosphate 1-kinase

ALDH8A1 aldehyde dehydrogenase 8 family member A1 IPP intracisternal A particle-promoted polypeptide

BRD3 bromodomain containing 3 KALRN kalirin RhoGEF kinase

GALNT2 polypeptide N-acetylgalactosaminyltransferase 2 BAZ2A bromodomain adjacent to zinc finger domain 2A

SH2D2A SH2 domain containing 2A

APOA5 apolipoprotein A5 ZPR1 ZPR1 zinc finger

EWSR1 EWS RNA binding protein 1
TBPL2 TATA-box binding protein like 2
FEN1 flap structure-specific endonuclease 1
ZCCHC24 zinc finger CCHC-type containing 24

ASAP1 ArfGAP with SH3 domain, ankyrin repeat and PH domain 1

EXOC3L2 exocyst complex component 3 like 2

PRTFDC1 phosphoribosyl transferase domain containing 1

RYBP RING1 and YY1 binding protein

RBPMS RNA binding protein, mRNA processing factor

APOE apolipoprotein E

IGF2BP2 insulin like growth factor 2 mRNA binding protein 2

TRIM5 tripartite motif containing 5

TNPO1 transportin 1

SERPINA1 serpin family A member 1

PDGFC platelet derived growth factor C TNFSF13B TNF superfamily member 13b

FAAP20 FA core complex associated protein 20

DUSP14 dual specificity phosphatase 14

FXYD5 FXYD domain containing ion transport regulator 5
AC011448.1 readthrough between NDUFA13 and YJEFN3
NDUFA13 NADH:ubiquinone oxidoreductase subunit A13

TPM3 tropomyosin 3

SLC44A2 solute carrier family 44 member 2

ETV7 ETS variant 7

KLHL8 kelch like family member 8 PDE5A phosphodiesterase 5A

PXN paxillin

MLXIPL MLX interacting protein like
TET2 tet methylcytosine dioxygenase 2
MXD1 MAX dimerization protein 1
GYPA glycophorin A (MNS blood group)

CYP3A5 cytochrome P450 family 3 subfamily A member 5

RBMS2 RNA binding motif single stranded interacting protein 2 PICALM phosphatidylinositol binding clathrin assembly protein

CAVIN2 caveolae associated protein 2 USP7 ubiquitin specific peptidase 7

ACAD10 acyl-CoA dehydrogenase family member 10

TNFRSF1A TNF receptor superfamily member 1A

EHD4 EH domain containing 4
BTBD2 BTB domain containing 2
PRELID3B PRELI domain containing 3B
PRPF3 pre-mRNA processing factor 3

RPH3A rabphilin 3A MFN2 mitofusin 2

ATP4A ATPase H+/K+ transporting subunit alpha TRPS1 transcriptional repressor GATA binding 1

TBX3 T-box 3

PGD phosphogluconate dehydrogenase

KLF9 Kruppel like factor 9 BCOR BCL6 corepressor

MRPL42 mitochondrial ribosomal protein L42 PARP1 poly(ADP-ribose) polymerase 1

SEPTIN5 septin 5

MFSD2A major facilitator superfamily domain containing 2A

PDS5B PDS5 cohesin associated factor B

YLPM1 YLP motif containing 1

CD33 CD33 molecule

MXI1 MAX interactor 1, dimerization protein GMCL2 germ cell-less 2, spermatogenesis associated

GPR137 G protein-coupled receptor 137

BAD BCL2 associated agonist of cell death

FAM171A2 family with sequence similarity 171 member A2

HAVCR1 hepatitis A virus cellular receptor 1

CDC42EP3 CDC42 effector protein 3

GABBR1 gamma-aminobutyric acid type B receptor subunit 1

H1FNT H1 histone family member N, testis specific F2R coagulation factor II thrombin receptor C5orf67 chromosome 5 open reading frame 67 MEX3C mex-3 RNA binding family member C SYK spleen associated tyrosine kinase

PSMB7 proteasome subunit beta 7 TNFSF10 TNF superfamily member 10 SMLR1 small leucine rich protein 1

SPRY1 sprouty RTK signaling antagonist 1

DNAJC5B	DnaJ heat shock protein family (Hsp40) member C5 beta
EEPD1	endonuclease/exonuclease/phosphatase family domain containing 1
KIT	KIT proto-oncogene, receptor tyrosine kinase
GSTA5	glutathione S-transferase alpha 5
DHX40	DEAH-box helicase 40
ABCB9	ATP binding cassette subfamily B member 9
DPYD	dihydropyrimidine dehydrogenase
NFYC	nuclear transcription factor Y subunit gamma
OR2V2	olfactory receptor family 2 subfamily V member 2
CHRM3	cholinergic receptor muscarinic 3
ALPK2	alpha kinase 2

Supplementary Table 2: The list of genes associated with NAFLD retrieved from the Open Target Genetics platform (https://genetics.opentargets.org)

Gene symbol	Gene name
PNPLA3	patatin like phospholipase domain containing 3
SAMM50	SAMM50 sorting and assembly machinery component
GCKR	glucokinase regulator
GATAD2A	GATA zinc finger domain containing 2A
PDE4D	phosphodiesterase 4D
PWWP3A	PWWP domain containing 3A, DNA repair factor
NR1H3	nuclear receptor subfamily 1 group H member 3
ZNF512	zinc finger protein 512
NR3C2	nuclear receptor subfamily 3 group C member 2
CYP26B1	cytochrome P450 family 26 subfamily B member 1
DCLK1	doublecortin like kinase 1
PTPRU	protein tyrosine phosphatase receptor type U
NGF	nerve growth factor
YIPF1	Yip1 domain family member 1
TCF7L2	transcription factor 7 like 2
ST3GAL4	ST3 beta-galactoside alpha-2,3-sialyltransferase 4
HS3ST1	heparan sulfate-glucosamine 3-sulfotransferase 1
ESR1	estrogen receptor 1
GC	GC vitamin D binding protein
LCP1	lymphocyte cytosolic protein 1
SLC38A8	solute carrier family 38 member 8
ADRA2A	adrenoceptor alpha 2A
TIMP2	TIMP metallopeptidase inhibitor 2
BMP6	bone morphogenetic protein 6
ABCB11	ATP binding cassette subfamily B member 11
PLPPR4	phospholipid phosphatase related 4
HLA-DQB1	major histocompatibility complex, class II, DQ beta 1
COL13A1	collagen type XIII alpha 1 chain
FDFT1	farnesyl-diphosphate farnesyltransferase 1
QPCTL	glutaminyl-peptide cyclotransferase like
CRACR2A	calcium release activated channel regulator 2A
SDK1	sidekick cell adhesion molecule 1
PRKCA	protein kinase C alpha
TRAF3	TNF receptor associated factor 3
ADH1C	alcohol dehydrogenase 1C (class I), gamma polypeptide
PALLD	palladin, cytoskeletal associated protein
ETS1	ETS proto-oncogene 1, transcription factor
PZP	PZP alpha-2-macroglobulin like
ALDH8A1	aldehyde dehydrogenase 8 family member A1

AGTR2 angiotensin II receptor type 2

MICB MHC class I polypeptide-related sequence B CYP2C9 cytochrome P450 family 2 subfamily C member 9

IL2RA interleukin 2 receptor subunit alpha SLC9A9 solute carrier family 9 member A9 EHBP1L1 EH domain binding protein 1 like 1

HERPUD family member 2

FARP1 FERM, ARH/RhoGEF and pleckstrin domain protein 1

TLCD4-RWDD3 TLCD4-RWDD3 readthrough

NFIC nuclear factor I C

ST8SIA1 ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 1

ACTR5 actin related protein 5 MTRNR2L11 MT-RNR2 like 11 TEX36 testis expressed 36

MACROD2 mono-ADP ribosylhydrolase 2

CACNA2D1 calcium voltage-gated channel auxiliary subunit alpha2delta 1

SEL1L3 SEL1L family member 3 SIK1 salt inducible kinase 1

RAB37 RAB37, member RAS oncogene family

HNRNPA3 heterogeneous nuclear ribonucleoprotein A3

CNTN5 contactin 5

KH RNA binding domain containing, signal transduction

KHDRBS3 associated 3 SVIL supervillin

CHST2 carbohydrate sulfotransferase 2

NUDT4 nudix hydrolase 4

IL18RAP interleukin 18 receptor accessory protein FAM174A family with sequence similarity 174 member A

MRPL39 mitochondrial ribosomal protein L39

PCSK5 proprotein convertase subtilisin/kexin type 5

CDH4 cadherin 4 CDH2 cadherin 2

NDRG2 NDRG family member 2

C1orf94 chromosome 1 open reading frame 94 SLC22A18 solute carrier family 22 member 18

PCSK2 proprotein convertase subtilisin/kexin type 2

SOX17 SRY-box 17

ADAP2 ArfGAP with dual PH domains 2 SGSM2 small G protein signaling modulator 2

IL25 interleukin 25

PKD2L1 polycystin 2 like 1, transient receptor potential cation channel

MSRA methionine sulfoxide reductase A SLC22A4 solute carrier family 22 member 4

GABRB3 gamma-aminobutyric acid type A receptor beta3 subunit

RAB11B RAB11B, member RAS oncogene family

ATP13A2 ATPase cation transporting 13A2 DUT deoxyuridine triphosphatase

ADAM18 ADAM metallopeptidase domain 18

FHIT fragile histidine triad diadenosine triphosphatase HLA-DRB1 major histocompatibility complex, class II, DR beta 1

IDS iduronate 2-sulfatase BTNL2 butyrophilin like 2

CCL4L2 C-C motif chemokine ligand 4 like 2

ACTN1 actinin alpha 1

KRT18P32 keratin 18 pseudogene 32

NPLOC4 NPL4 homolog, ubiquitin recognition factor

EHBP1 EH domain binding protein 1

EFR3B EFR3 homolog B

ARL14 ADP ribosylation factor like GTPase 14

TRIM4 tripartite motif containing 4
PADI4 peptidyl arginine deiminase 4

HLA-DRA major histocompatibility complex, class II, DR alpha

TP63 tumor protein p63

DLEU7 deleted in lymphocytic leukemia 7

HLA-DQA2 major histocompatibility complex, class II, DQ alpha 2

TRIP11 thyroid hormone receptor interactor 11

CHRNA3 cholinergic receptor nicotinic alpha 3 subunit

PC pyruvate carboxylase

CTNNA2 catenin alpha 2

SLC30A7 solute carrier family 30 member 7

HUNK hormonally up-regulated Neu-associated kinase

RYR3 ryanodine receptor 3

BATF basic leucine zipper ATF-like transcription factor HIKESHI heat shock protein nuclear import factor hikeshi

CCND2 cyclin D2

VGLL4 vestigial like family member 4

NXPE2 neurexophilin and PC-esterase domain family member 2

FAF1 Fas associated factor 1

SLC35F1 solute carrier family 35 member F1

WDR37 WD repeat domain 37

SCAMP3 secretory carrier membrane protein 3

CIITA class II major histocompatibility complex transactivator

CDH8 cadherin 8

ADAMTS20 ADAM metallopeptidase with thrombospondin type 1 motif 20

IL22RA2 interleukin 22 receptor subunit alpha 2

POPDC3 popeye domain containing 3

SGCD sarcoglycan delta

ANKS1A ankyrin repeat and sterile alpha motif domain containing 1A

LHFPL3 LHFPL tetraspan subfamily member 3

UGT1A10 UDP glucuronosyltransferase family 1 member A10

PITX1 paired like homeodomain 1

core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-

C1GALT1 galactosyltransferase 1 PLCB1 phospholipase C beta 1

STAT2 signal transducer and activator of transcription 2

ERAP1 endoplasmic reticulum aminopeptidase 1

PTPN22 protein tyrosine phosphatase non-receptor type 22

MUC7 mucin 7, secreted

RBMS1 RNA binding motif single stranded interacting protein 1

translocase of inner mitochondrial membrane domain containing

TIMMDC1 1

ST6GAL1 ST6 beta-galactoside alpha-2,6-sialyltransferase 1

HIST1H2BJ histone cluster 1 H2B family member j

METTL1 methyltransferase like 1 PHF21A PHD finger protein 21A ZMAT4 zinc finger matrin-type 4

TYK2 tyrosine kinase 2

WDFY4 WDFY family member 4 SHLD1 shieldin complex subunit 1

ADGRD1 adhesion G protein-coupled receptor D1

NOTCH4 notch receptor 4

HLA-DQB2 major histocompatibility complex, class II, DQ beta 2

AGXT2 alanine--glyoxylate aminotransferase 2

RASGRF1 Ras protein specific guanine nucleotide releasing factor 1

TRHDE thyrotropin releasing hormone degrading enzyme

TNFRSF13B TNF receptor superfamily member 13B

PICALM phosphatidylinositol binding clathrin assembly protein

RBPMS RNA binding protein, mRNA processing factor

IL12A interleukin 12A

COL5A1 collagen type V alpha 1 chain

HYKK hydroxylysine kinase

transient receptor potential cation channel subfamily M member

TRPM6 6

FAM49B family with sequence similarity 49 member B

DIP2C disco interacting protein 2 homolog C