

Supplementary table 1. *Genes on chromosome 2 region from haplotype analysis.*

Thbs1	thrombospondin 1
Fsip1	fibrous sheath-interacting protein 1
A930104D05Rik	RIKEN cDNA A930104D05 gene
Gpr176	G protein-coupled receptor 176
1700054M17Rik	RIKEN cDNA 1700054M17 gene
Eif2ak4	eukaryotic translation initiation factor 2 alpha kinase 4
Srp14	signal recognition particle 14
Bmf	BCL2 modifying factor
Bub1b	budding uninhibited by benzimidazoles 1 homolog, beta (<i>S. cerevisiae</i>)
Pak6	p21 (CDKN1A)-activated kinase 6
Gm1337	gene model 1337, (NCBI)
Plcb2	phospholipase C, beta 2
5430417L22Rik	RIKEN cDNA 5430417L22 gene
A430105I19Rik	RIKEN cDNA A430105I19 gene
1810007E14Rik	RIKEN cDNA 1810007E14 gene
Disp2	dispatched homolog 2 (<i>Drosophila</i>)
Ivd	isovaleryl coenzyme A dehydrogenase
Bahd1	bromo adjacent homology domain containing 1
Chst14	carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 14
Ccdc32	coiled-coil domain containing 32
Rpusd2	RNA pseudouridylate synthase domain containing 2
Casc5	cancer susceptibility candidate 5
Rad51	RAD51 homolog (<i>S. cerevisiae</i>)
1200015F23Rik	RIKEN cDNA 1200015F23 gene
Gchfr	GTP cyclohydrolase I feedback regulator
Dnajc17	DnaJ (Hsp40) homolog, subfamily C, member 17
Zfyve19	zinc finger, FYVE domain containing 19
Ppp1r14d	protein phosphatase 1, regulatory (inhibitor) subunit 14D
Spint1	serine protease inhibitor, Kunitz type 1

Rhov	ras homolog gene family, member V
Vps18	vacuolar protein sorting 18 (yeast)
Dll4	delta-like 4 (Drosophila)
Chac1	ChaC, cation transport regulator-like 1 (E. coli)
Ino80	INO80 homolog (S. cerevisiae)
Exdl1	exonuclease 3'-5' domain-like 1
1500003O03Rik	RIKEN cDNA 1500003O03 gene
1700020I14Rik	RIKEN cDNA 1700020I14 gene
Oip5	Opa interacting protein 5
Nusap1	nucleolar and spindle associated protein 1
Ndufaf1	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 1
Rtf1	Rtf1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
Itpka	inositol 1,4,5-trisphosphate 3-kinase A
Ltk	leukocyte tyrosine kinase
Rpap1	RNA polymerase II associated protein 1
Tyro3	TYRO3 protein tyrosine kinase 3
6330405D24Rik	RIKEN cDNA 6330405D24 gene
Mga	MAX gene associated
Mapkbp1	mitogen-activated protein kinase binding protein 1
Pla2g4b	phospholipase A2, group IVB (cytosolic)
Spnb5	spectrin beta 5
Ehd4	EH-domain containing 4
Pla2g4e	phospholipase A2, group IVE
Pla2g4d	phospholipase A2, group IVD
Pla2g4f	phospholipase A2, group IVF
Vps39	vacuolar protein sorting 39 (yeast)
Tmem87a	transmembrane protein 87A
Ganc	glucosidase, alpha; neutral C
Capn3	calpain 3

Zfp106	zinc finger protein 106
Snap23	synaptosomal-associated protein 23
Lrrc57	leucine rich repeat containing 57
Cep27	centrosomal protein 27
Stard9	START domain containing 9
Cdan1	congenital dyserythropoietic anemia, type I (human)
Ttbk2	tau tubulin kinase 2
AV039307	expressed sequence AV039307
Ubr1	ubiquitin protein ligase E3 component n-recognin 1
Tmem62	transmembrane protein 62
Rnu3b-ps2	U3B small nuclear RNA pseudogene 2
Ccndbp1	cyclin D-type binding-protein 1
Epb4.2	erythrocyte protein band 4.2
Tgm5	transglutaminase 5
Tgm7	transglutaminase 7
Lcmt2	leucine carboxyl methyltransferase 2
Adal	adenosine deaminase-like
Zscan29	zinc finger SCAN domains 29
Tubgcp4	tubulin, gamma complex associated protein 4
Trp53bp1	transformation related protein 53 binding protein 1
Mtap1a	microtubule-associated protein 1 A
Hisppd2a	histidine acid phosphatase domain containing 2A
Ckmt1	creatine kinase, mitochondrial 1, ubiquitous
Strc	stereocilin
Catsper2	cation channel, sperm associated 2
Pdia3	protein disulfide isomerase associated 3
Ell3	elongation factor RNA polymerase II-like 3
Serinc4	serine incorporator 4
Serf2	small EDRK-rich factor 2
2310003F16Rik	RIKEN cDNA 2310003F16 gene
Mfap1b	microfibrillar-associated protein 1B

Mfap1a	microfibrillar-associated protein 1A
Wdr76	WD repeat domain 76
Frdm5	FERM domain containing 5
Casc4	cancer susceptibility candidate 4
Mageb3	melanoma antigen, family B, 3
Ctdspl2	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase like 2
Eif3j	eukaryotic translation initiation factor 3, subunit J
Spg11	spastic paraplegia 11
Patl2	protein associated with topoisomerase II homolog 2 (yeast)
B2m	beta-2 microglobulin
Trim69	tripartite motif-containing 69 tripartite motif-containing 69
4933406J08Rik	RIKEN cDNA 4933406J08 gene
Sord	sorbitol dehydrogenase
Duox2	dual oxidase 2
Duoxa2	dual oxidase maturation factor 2
Duoxa1	dual oxidase maturation factor 1
Duox1	dual oxidase 1
Shf	Src homology 2 domain containing F
Slc28a2	solute carrier family 28 (sodium-coupled nucleoside transporter), member 2
Bambi-ps1	BMP and activin membrane-bound inhibitor, pseudogene (<i>Xenopus laevis</i>)
Gatm	glycine amidinotransferase (L-arginine:glycine amidinotransferase)
Spata511	spermatogenesis associated 5-like 1
AA467197	expressed sequence AA467197
Mirn147	microRNA 147
Slc30a4	solute carrier family 30 (zinc transporter), member 4
4930417H01Rik	RIKEN cDNA 4930417H01 gene
4930580A09Rik	RIKEN cDNA 4930580A09 gene
Pldn	pallidin
Sqrdl	sulfide quinone reductase-like (yeast)

Supplementary table 2. *Genes on chromosome 19 region from haplotype analysis.*

Acs15	acyl-CoA synthetase long-chain family member 5
Zdhhc6	zinc finger, DHHC domain containing 6
Vti1a	vesicle transport through interaction with t-SNAREs homolog 1A (yeast)
D730002M21Rik	RIKEN cDNA D730002M21 gene
Habp2	hyaluronic acid binding protein 2
Nrap	nebulin-related anchoring protein
Casp7	caspase 7
9930023K05Rik	RIKEN cDNA 9930023K05 gene
Dclre1a	DNA cross-link repair 1A, PSO2 homolog (<i>S. cerevisiae</i>)
Nhlrc2	NHL repeat containing 2
Afap112	actin filament associated protein 1-like 2
Ablim1	actin-binding LIM protein 1
Trub1	TruB pseudouridine (psi) synthase homolog 1 (<i>E. coli</i>)
Atrn1	attractin like 1
2700078E11Rik	RIKEN cDNA 2700078E11 gene
Nanos1	nanos homolog 1 (<i>Drosophila</i>)
Eif3a	eukaryotic translation initiation factor 3, subunit A
1810055E12Rik	RIKEN cDNA 1810055E12 gene
Sfxn4	sideroflexin 4
Prdx3	peroxiredoxin 3
Grk5	G protein-coupled receptor kinase 5
BC029127	cDNA sequence BC029127
