

Additional Table 1 Candidate genes located in genomic regions with a high frequency of ROH

Population	Chromosome	Position(Mb)	Number. of SNP	Gene name
Landrace	7	57.62~58.77	21	<i>RPS17,FURIN,HDDC3,RCCD1,WHAMM,FES,MAN2A2,UNC45A,UROCI,ZXDC,CPEB1,PDE8A,FSD2,SLC41A3</i>
				<i>ACAN,HAPLN3,FANCI,POLG,MFGE8,ABHD2,RHCG,RLBP1</i>
	7	62.40~64.65	17	<i>IMP3,NEIL1,COMMD4,C15orf39,RPP25,MPI,CPLX3,LMAN1L,CYP1A1,ISLR,C15orf59,SNUPN,MAN2C1,PPCDC,SCAMP5,COX5A,FAM219B,SCAMP2,ULK3,CYP1A2,CLK3,PML,STOML1,NPTN,HCN4,PTPN9,CSK,EDC3,SIN3A</i>
				<i>MNI,PITPNB,TTC28</i>
Songliao	7	57.55~58.77	24	<i>RPS17,FURIN,HDDC3,RCCD1,WHAMM,FES,MAN2A2,UNC45A,UROCI,ZXDC,HOMER2,CPEB1,PDE8A,FSD2,SLC41A3</i>
				<i>GPR33,GZMB,AP4S1,SCFD1,NOVA1,HEATR5A</i>
	7	71.28~80.08	91	<i>HECTD1,G2E3,STXBP6</i> <i>CRYBB1,CRYBA4,ZNRF3,RHBDD3,GAS2L1,</i>
Yorkshire	14	45.86~50.03	114	<i>RASL10A,UQCR10,CRYBB3,CRYBB2,SEZ6L,HP S4,SRRD,TFIP11,TPST2,MNI,EMID1,EWSR1,AP1B1,NIPSNAP1,KIAA1671,MYO18B,ASPHD2,PITPNB,MTMR3,GRK3,TTC28,KREMEN1</i>
				<i>ONECUT2,SUMO1,POLI,C18orf54,RAB27B,</i>
	1	112.05~118.03	79	<i>CCDC68,TXNL1,FECH,NARS,MTFMT,SPG21,PIF1,MBD2,WDR7,ANKDD1A</i>
Yorkshire	1	120.25~124.07	63	<i>ANXA2,RORA,ICE2</i>
				<i>EID1,DUOXA2,COPS2,SECISBP2L,SLC12A1,MYEF2,SLC24A5,SEMA6D,SQRDL,GATM,</i>
	1	135.63~141.36	64	<i>C15orf48,SLC28A2,DUOX1,DUOXAI,DUOX2,TERB2,DTWD1,GALK2,SHC4,CEP152,FBN1,SLC30A4,SPATA5L1,SHF,SORD</i>

4	41.58~42.18	12	<i>RPL30,ERICH5,LAPTM4B,MTDH,POP1,RIDA</i>
4	77.27~78.13	8	<i>GGH</i>
4	79.61~81.08	10	<i>NSMAF,TOX</i>
4	82.39~82.61	9	<i>SDR16C5,PLAG1</i>
			<i>RGS4,CCDC190,SPATA46,SH2D1B,FCRLB,</i>
			<i>CFAP126,MPZ,PCP4L1,NR1I3,APOA2,FCER1G</i>
			<i>,PPOX,USP21,NIT1,TSTD1,USF1,NHLH1,</i>
			<i>PEA15,PIGM,KCNJ10,SLAMF9,TAGLN2,VSIG8</i>
			<i>,FCRL6,DUSP23,CRP,CRP,OR10J5,</i>
			<i>LOC100517891,OR10J3,OR10J1,OR6N1,OR6K6</i>
			<i>,OR6K3,OR6K2,OR10Z1,OR6P1,OR6Y1,CD1A,</i>
4	94.73~100.30	107	<i>HSD17B7,UAP1,FCGR2B,TOMM40L,NDUFS2,</i>
			<i>B4GALT3,UFC1,DEDD,PFDN2,PVRL4,F11R,</i>
			<i>SLAMF7,LY9,CD244,CD48,CD84,SLAMF6,</i>
			<i>VANGL2,NCSTN,PEX19,CASQ1,ATP1A4,IGSF8,</i>
			<i>KCNJ9,CFAP45,FCER1A,CADM3,OR10K2,</i>
			<i>NUF2,RGS5,DDR2,SDHC,ADAMTS4,</i>
			<i>ARHGAP30,SLAMF1,COPA,ATP1A2,SLAMF8,</i>
			<i>ACKR1,OR6N2,OLFML2B</i>
			<i>VPS52,B3GALT4,WDR46,PFDN6,TAPBP,ZBTB2</i>
			<i>2,DAXX,BAK1,ZBTB9,PHF1,HMGA1,RPS18,</i>
			<i>RGL2,</i>
7	33.74~35.73	38	<i>SYNGAP1,CUTA,UQCC2,LEMD2,MLN,SPDEF</i>
			<i>,PACSINI,SNRPC,TAF11,ITPR3,GRM4,</i>
			<i>UHRF1BP1,ANKS1A,DST</i>
			<i>RAB44,PII6,PIMI,TMEM217,STK38,PPIL1,</i>
7	37.13~37.98	12	<i>C6orf89,MTCH1,FGD2,RNF8,CPNE5</i>
			<i>ZNRF3,RHBDD3,GAS2L1,RASL10A,MN1,EMID</i>
14	47.26~49.72	61	<i>1,EWSR1,AP1B1,NIPSNAP1,PITPNB,TTC28,</i>
			<i>KREMEN1</i>
