

Table S2: Runs of homozygosity segments shared by over 50% of Shagya Arabians.

Chr.	Length (MB)	Begin	End	Annotated genes
1	0.02	9501779	9519364	-
1	0.64	107739971	108378967	<i>TARSL2, TJP1, FAM189A1</i>
2	1.06	27344713	28404281	<i>OPRD1, YTHDF2, GMEB1, TAF12, RAB42, RCC1, PHACTR4, MED18, SESN2, ATP5IF1, DNAJC8, PTAFR, EYA3, XKR8, SMPDL3B, RPA2, THEMIS2, PPP1R8, STX12, FAM76A, IFI6, FGR, AHDC1</i>
3	0.93	120425335	121351057	<i>NKX1-1, UVSSA, MAEA, CTBP1, SPON2, RNF212, FGFR1, IDUA, SLC26A1, DGKQ, TMEM175, GAK, MIR9070, CPLX1, PCGF3, SLC49A3, MYL5, ATP5ME, PDE6B, PIGG</i>
6	0.18	8018928	8201303	<i>ZNF142, BCS1L, RNF25, STK36, TTLL4, CYP27A1, PRKAG3</i>
7	0.25	40755980	41002946	<i>NTM</i>
7	0.88	41060288	41938373	<i>NTM, OPCML</i>
8	0.60	24634587	25231545	<i>RHOF, SETD1B, HPD, PSMD9, WDR66, BCL7A, MLXIP, IL31, LRRC43, B3GNT4, DIABLO, VPS33A, CLIP1, ZCCHC8, RSRC2, KNTC1</i>
8	0.27	25825349	26097405	<i>KMT5A, RILPL2, SNRNP35, RILPL1, TMED2, DDX55, EIF2B1, GTF2H3, TCTN2, ATP6V0A2, DNAH10</i>
8	0.00	61839365	61839365	-
9	0.53	31284516	31817479	<i>RB1CC1, ALKAL1</i>
9	0.76	31853320	32616875	<i>ST18, PCMTD1</i>
9	0.22	32677402	32897046	<i>PXDNL</i>
9	0.52	33532618	34053277	<i>SNTG1</i>
9	0.87	40515338	41382074	<i>TRIQQ</i>
9	0.58	41416774	41992448	<i>FAM92A, RBM12B, TMEM67</i>
9	0.76	41998238	42758961	<i>TMEM67, PDP1, CDH17, GEM, RAD54B, VIRMA</i>
9	0.03	42822721	42852068	<i>ESRP1, DPY19L4</i>
9	0.01	45565108	45576777	<i>MTDH</i>
9	0.92	45613807	46532261	<i>LAPTM4B, MATN2, RPL30, ERICH5, RIDA, POP1, NIPAL2, KCNS2, STK3</i>
9	0.61	79742728	80350559	<i>FAM135B, COL22A1</i>
11	0.72	21898983	22614034	<i>KRT10B, KRT28, KRT27, KRT26, KRT25, KRT24, KRT222, SMARCE1, CCR7, TNS4, IGFBP4, TOP2A, GJD3, RARA, CDC6, WIPF2, RAPGEFL1, CASC3, MSL1, NR1D1, THRA, MED24, CSF3, PSMD3, GSDMA, LRRC3C, ORMDL3, GSDMB</i>
11	0.00	22654340	22654340	<i>IKZF3</i>
11	0.05	22703722	22750090	<i>IKZF3, GRB7</i>
11	0.31	22880941	23186362	<i>CDK12, MED1, FBXL20, STAC2, RPL19, CACNB1, ARL5C, PLXDC1</i>
11	1.12	31314776	32434775	<i>NOG, DGKE, TRIM25, COIL, SCPEP1, AKAP1, MSI2, CCDC182</i>
11	0.04	32617562	32658713	<i>DYNLL2</i>
11	0.58	32803157	33383463	<i>LPO, MPO, TSPOAP1, RNF43, SUPT4H1, HSF5, MTMR4, TEX14, RAD51C, PPM1E</i>
11	0.23	34276336	34508997	<i>MED13</i>
11	0.01	34577854	34586693	<i>BRIP1</i>
11	0.12	34683002	34804064	<i>BRIP1</i>
15	1.04	80216896	81259084	<i>NBAS, FAM84A</i>
16	0.16	33620538	33782347	<i>ERC2</i>
16	0.35	41847777	42194451	<i>LTF, CCRL2, CCR5, CCR2, CCR3</i>
18	0.56	49358178	49917777	<i>SSB, METTL5, UBR3, MYO3B</i>
18	0.51	50413659	50924378	<i>TLK1, METTL8, DCAF17</i>
18	0.09	81688757	81776604	<i>CREB1, METTL21A</i>
19	0.07	34349123	34421059	<i>XXYL1</i>
23	0.42	25249949	25673636	<i>GLIS3, SLC1A1, SPATA6L, CDC37L1, AK3, RCL1</i>