

Supplementary Files: Identification of Ovine *KRTAP28-1* and Its Association with Wool Fibre Diameter

(A)

hKAP23-1	.MSYNC ^Y CC ^Y GN ^Y FS ^Y SS ^Y HS ^Y CE ^Y GYL ^Y C ^Y YS ^Y GY ^Y SR ^Y GG ^Y SS ^Y Y ^Y PS ^Y N ^Y .LVYSTEPLISQHL	47
sKAP28-1	.MSSND ^Y SC ^Y SG ^Y NND ^Y SC ^Y SL ^Y GS ^Y Y ^Y CH ^Y V ^Y PV ^Y NS ^Y ST ^Y TL ^Y Y ^Y FTG ^Y .VNYGDAFD ^Y SS ^Y RN ^Y	47
sKAP3-1MACCAPRCCSVRTG ^Y PATTICSSDKFCRCGVCLPSTCPH	38
sKAP3-2MACCAPRCCSVRTG ^Y PATTICSSDKFCRCGVCLPSTCPH	38
sKAP3-3MACCARLCCSV ^Y PTT ^Y PATTICSSDKFCRCGVCLPSTCPH	38
hKAP25-1	MHNRSQ ^Y G ^Y FFF ^Y SS ^Y CH ^Y PQ ^Y NH ^Y V ^Y SY ^Y G ^Y C ^Y Q ^Y SP ^Y S ^Y F ^Y I ^Y FC ^Y RC ^Y Q ^Y SL ^Y N ^Y F ^Y V ^Y S ^Y RT ^Y C ^Y Y ^Y PL ^Y SY ^Y FS ^Y	50
hKAP23-1	PAGFLSLQGLSGDLLGNP.....	65
sKAP28-1	KTWLLD ^Y NS ^Y PET ^Y RD ^Y KL ^Y SS ^Y Y ^Y Q ^Y P ^Y SS ^Y CE ^Y PT ^Y TY ^Y KT ^Y SH ^Y YS ^Y ST ^Y LN ^Y CG ^Y H ^Y RC ^Y Y ^Y E ^Y Q ^Y L ^Y V ^Y LS ^Y	97
sKAP3-1	NI ^Y SL ^Y L ^Y Q ^Y PT ^Y CC ^Y DN ^Y SP ^Y V ^Y PC ^Y V ^Y Y ^Y PD ^Y TY ^Y V ^Y PT ^Y CF ^Y LL ^Y N ^Y SS ^Y H ^Y PT ^Y P ^Y GL ^Y SG ^Y IN ^Y L ^Y TT ^Y FI ^Y Q ^Y P	88
sKAP3-2	DI ^Y SL ^Y L ^Y Q ^Y PT ^Y CC ^Y DN ^Y SP ^Y V ^Y PC ^Y V ^Y Y ^Y PD ^Y TY ^Y V ^Y PT ^Y CF ^Y LL ^Y N ^Y SS ^Y H ^Y PT ^Y P ^Y GL ^Y SG ^Y IN ^Y L ^Y TT ^Y FI ^Y Q ^Y P	88
sKAP3-3	TV ^Y WF ^Y LE ^Y PT ^Y CC ^Y DN ^Y RP ^Y PP ^Y CHI ^Y P ^Y Q ^Y PS ^Y V ^Y PT ^Y CF ^Y LL ^Y N ^Y SS ^Y Q ^Y PT ^Y P ^Y GL ^Y ES ^Y IN ^Y L ^Y TT ^Y Y ^Y T ^Y Q ^Y P	88
hKAP25-1	YGNQTIG ^Y SI ^Y NS ^Y FR ^Y SL ^Y NY ^Y V ^Y SH ^Y S ^Y F ^Y Q ^Y PI ^Y S ^Y FM ^Y H ^Y SS ^Y F ^Y Q ^Y PAC ^Y S ^Y DF ^Y V ^Y GW ^Y Q ^Y SP ^Y FL ^Y RR	100
hKAP23-1	65
sKAP28-1	PLVRI ^Y SP ^Y V ^Y L ^Y V ^Y NR ^Y QC ^Y IM ^Y CV ^Y CV ^Y CV ^Y CV ^Y V ^Y HA ^Y HT ^Y LS ^Y H ^Y V ^Y QL ^Y F ^Y V ^Y TP	135
sKAP3-1	GCENVCEPRC.....	98
sKAP3-2	GCENVCEPRC.....	98
sKAP3-3	SCEPCIPSC.....	98
hKAP25-1	TC.....	102

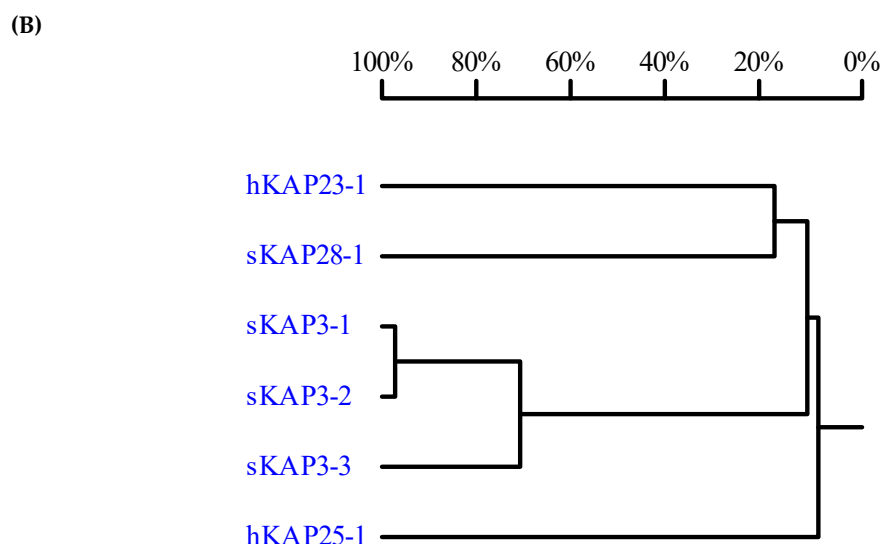


Figure S1. Comparison of the predicated amino acid sequences of the newly identified ovine KAP28-1 gene and other similar KAP genes. Three ovine KAP3-n genes and the human KAP23-1 gene that are shown to be most related to ovine KAP28-1 in Figure 1 are used for the comparison, together with the human KAP25-1 gene. The alignment of these sequences is shown (A), together with the sequence homology tree (B). The ovine KAPs are indicated with a prefix “s”, while the human KAPs are indicated with “h”. The GenBank accession numbers for other KAP genes are: M21099 (sKAP3-1), M21100 (sKAP3-2), M21103 (sKAP3-3), NM_181624 (hKAP23-1) and NM_001128598 (hKAP25-1).