

Table S1. Summary of SNP quality control in Belgian Milk Sheep (BMS), Flemish Sheep (FLS) and Friesian Milk Sheep (FMS)

	Number of SNPs		
	BMS	FLS	FMS
Number of genotyped animals	94	23	22
Total number of SNPs (OvineSNP50)	54241	54241	54241
Call rate (<0.95)	4689	4112	3986
No chromosomal coordinates	342	351	349
SNPs on sex chromosomes	1335	899	1367
Total removed SNPs	6376	5363	5706
Total SNPs passing quality control	47875	48879	48539

Table S2. Summary of inbreeding coefficient analysis based on runs of homozygosity (ROH) in the studied breeds, where N is the number of studied individuals, l is the minimal number of SNPs in a ROH, mean H_o is the mean observed heterozygosity, mean H_e is the mean expected heterozygosity and mean F_{ROH} is the mean inbreeding coefficient based on ROH.

Breed		N	l	Mean H_o	Mean H_e	Mean F_{IS}	Mean F_{ROH}
Belgian Milk Sheep	BMS	94	49	0.310	0.316	0.019	0.145
Colored Spaelsau	CSP	3	36	0.336			0.084
East-Friesian Brown	EFB	39	50	0.295	0.301	0.019	0.170
East-Friesian White	EFW	9	42	0.317			0.086
Finn Sheep	FIN	99	43	0.346	0.357	0.032	0.056
Flemisch Sheep	FLS	23	42	0.330	0.327	-0.008	0.123
Friesian Milk Sheep	FMS	22	45	0.313	0.293	-0.067	0.100
Lacaune	LAC	103	41	0.362	0.365	0.010	0.044
Old Norwegian Spaelsau	ONS	15	40	0.339			0.090
White Spaelsau	WSP	32	43	0.330	0.334	0.013	0.093