

1 **Association of polymorphisms at the microRNA binding site of the caprine *KITLG***

2 **3'-UTR with litter size**

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## Supplementary tables

24 **Table S1** Primer information of *KITLG* gene for detecting SNP and cloning 3'UTR

Primer	Sequence (5'→3')	Objective	GenBank accession		Product size (bp)	Ta (°C)
			No.	NM_001285670		
KF1	GCCTCCAGAAGCATCTAAC	Screening	1322		275	51
KR1	CAAGTTCAGACCCACATCC	polymorphism	1596			
KF2	<u>CTCGAG</u> GCCTCCAGAAGCATCTAAC	Cloning	1322		289	53
KR2	<u>GCGGCCGC</u> CAAGTTCAGACCCACATCC	3'UTR	1596			
KF3	TAGCATCATCCACTGTTCAT	Screening	1493		298	50
KR3	ATGCCTCCTTGGCAGAT	polymorphism	1790			
KF4	GACTTAGGAGGAATCACTGA	Screening	1908		386	50
KR4	AACGCAATGTCCATCTTG	polymorphism	2293			
KF5	TGAGTGAATTTGGCAGGAA	Screening	2253		250	51
KR5	GGTGGTAGGATATGGCAATA	polymorphism	2502			
KF6	CCTTCAATAGAGTGACACAG	Screening	2512		344	50
KR6	CAGGTCCTTACAGCCATTA	polymorphism	2855			

25 Note: Ta = annealing temperature. The underlined bases in KF2/KR2 represent *XhoI* and *NotI* endonuclease  
 26 enzyme loci.

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35 **Table S2** Primer information for real-time quantitative PCR

GenBank accession No.	Gene	Sequence (5'→3')	Region	Product size (bp)	Ta (°C)
NM_001285670	<i>KITLG</i>	F: GTTGCAGCCAGCTCCCTTAG	722	95	60
		R: GCTACGGCTGCCCATTGTAG	816		
AF481159	<i>β-actin</i>	F: CCAAAGCCAACCGTGAGAA	80	101	60
		R: AGAGGCGTACAGGGACAGCA	180		
AJ431207	<i>GAPDH</i>	F: CACCCTCAAGATTGTCAGC	324	106	60
		R: CAGTGGTCATAAGTCCCTCC	430		

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51 **Table S3** Genotypic distribution of three loci in the caprine *KITLG* gene

Locus		Number of animals		
c. 1389C>T	Genotype	CC	227	
		CT	46	
		TT	112	
	Allele	C	0.65	
		T	0.35	
	He	0.12		
	PIC	0.35		
	Equilibrium $\chi^2$ test			
	c.1457A>C	Genotype	AA	150
			AC	77
CC			158	
Allele		A	0.49	
		C	0.51	
He		0.20		
PIC		0.37		
Equilibrium $\chi^2$ test			<i>P</i> <0.001	
c.1520G>A		Genotype	GG	227
			GA	46
	AA		112	
	Allele	G	0.65	
		A	0.35	
	He	0.12		
	PIC	0.35		
	Equilibrium $\chi^2$ test		<i>P</i> <0.001	

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