

Figure S1. Electrophoresis pattern of bovine *HMG A2* gene of P1-I_{8-bp}

Table S1. Polymorphism parameters of P1-I_{8-bp} of bovine *HMG A2* gene.

Size*	Genotypic frequencies		Allelic frequencies		HWE <i>P</i> value	Population parameters				
	II	ID	DD	I	D	Ho	He	Ne	PIC	
130	0.22	0.26	0.52	0.35	0.65	<i>P</i> <0.05	0.52	0.48	1.840	0.35

Note: * refers to the number of individual bovine analyzed. **HWE**, Hardy-Weinberg equilibrium; **Ho**, homozygosity; **He**, heterozygosity; **Ne**, effective number of alleles; **PIC**, Polymorphism information content. **Sizes**: the number of individual cattle analyzed.

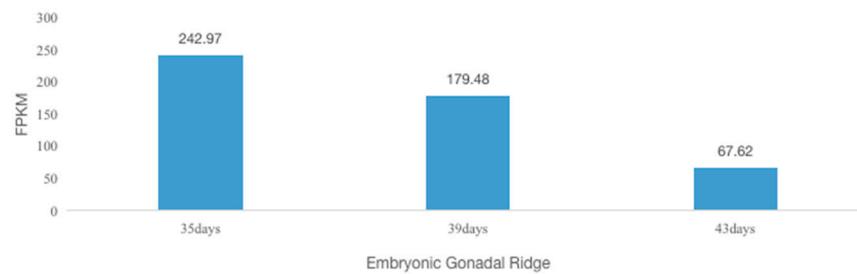


Figure S2. Expression of *HMGA2* gene in bovine. Note: FPKM: Fragment Per Kilobase of transcript, per Million mapped reads

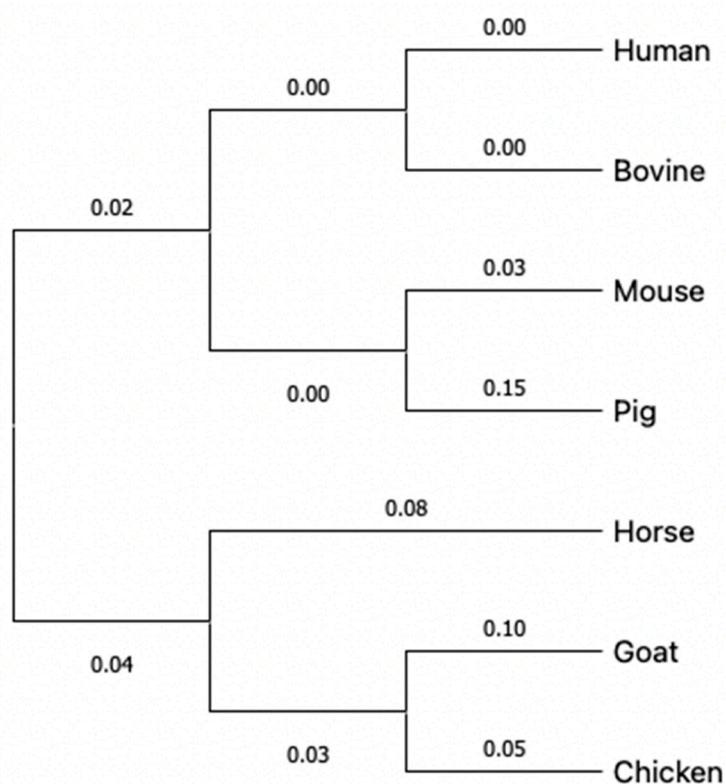


Figure S3. Phylogenetic tree based on the amino acid sequences of HMGA2 among different species. Note: Bootstrap method: 1000