

Table S1: *BoLA-DRB3* allele frequencies among the main two cattle breeds in this study Japanese Black (JB) and Holstein (H)

<i>BoLA-DRB3.2</i> allele	Allele frequencies	
	Japanese Black (JB)	Holstein (H)
*3	37	12 (1 homozygous)
*7	19	-
*8	99 (4 homozygous)	6
*11	54	3
*22	8 (2 homozygous)	6
*24	26	19 (2 homozygous)
*28	23	4
*1	49 (1 homozygous)	-
*41	32	-
*10	274 (23 homozygous)	3
*16	344 (49 homozygous)	39 (8 homozygous)