

**Supplementary Table S6.** Annotation of variants identified in genes having differential expression between *E. coli*(+) and *E. coli*(-).

Gene	BT A	SNP	MAF POS	REF	AL T	+ve cows (n)	MAF NEG	-ve cows (n)	Consequence	Impact	Gene_ensembl	Existing varn
<i>EYA3</i>	2	125367162	0.25	G	T	8	0.833	9	intron_variant	MODIFIER	ENSBTAG00000043989	rs110270588
<i>RAC2</i>	5	75664664	0.278	G	T	9	0.833	9	intron_variant	MODIFIER	ENSBTAG00000011043	rs137621320
<i>GNG7</i>	7	21014556	0.25	G	C	8	0.813	8	intron_variant	MODIFIER	ENSBTAG00000007644	rs209187815
<i>ARHGAP26</i>	7	54231683	0.833	A	G	9	0.222	9	intron_variant	MODIFIER	ENSBTAG00000027151	rs42350004
<i>EBF1*</i>	7	70585950	0.063	G	T	8	0.833	9	intron_variant	MODIFIER	ENSBTAG00000037508	
<i>EBF1*</i>	7	70585950	0.875	G	C	8	0.111	9	intron_variant	MODIFIER	ENSBTAG00000037508	rs41656037
<i>FAM129A</i>	16	66006047	0.25	A	G	8	0.889	9	intron_variant	MODIFIER	ENSBTAG00000014548	rs41817426
<i>WIP1</i>	19	61782120	0.25	T	C	8	0.889	9	downstream gene variant	MODIFIER	ENSBTAG00000010637	rs41928661
<i>ARSG*</i>	19	61782120	0.25	T	C	8	0.889	9	intron_variant	MODIFIER	ENSBTAG00000039556	rs41928661
<i>ARSG*</i>	19	61874326	0.813	C	A	8	0.167	9	intron_variant	MODIFIER	ENSBTAG0000003074	rs450146987
<i>SLC16A6</i>	19	61874326	0.813	C	A	8	0.167	9	intron_variant	MODIFIER	ENSBTAG00000010637	rs450146987
<i>PFKFB4</i>	22	51327126	0.938	A	G	8	0.222	9	intron_variant	MODIFIER	ENSBTAG00000006752	rs42013635
<i>BOLA-DOA</i>	23	7314809	0.063	T	G	8	0.889	9	downstream gene variant	MODIFIER	ENSBTAG00000006490	Not reported
<i>CCND3</i>	23	15736092	1	T	C	8	0.056	9	intergenic_variant	MODIFIER	Not reported	rs110778610