

**RNA-Seq analysis of ileocecal valve and peripheral blood from Holstein cattle infected with *Mycobacterium avium* subsp. *paratuberculosis* revealed dysregulation of the CXCL8/IL8 signaling pathway**

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**Supplementary Table 1. Biological samples and experimental replicates RNA Seq data.**

Cow ID	Replicate	Sample	Total number of reads	Reds after trimming	Reads after mapping	Mapped reads (%)	Multiple alignments	Multiple alignments (%)
1	–	PB	25378997	25321021	23442982	92.6	1013576	4.0
1	–	ICV	22485395	22448313	20778436	92.6	960728	4.3
2	1	PB	27430862	26221879	24731206	94.3	1348272	5.5
2	2	PB	25423706	24274388	22928902	94.5	1175411	5.1
2	1	ICV	21955291	20865686	19323967	92.6	789040	4.1
2	2	ICV	20328572	19424275	18014936	92.7	883206	4.9
3	–	PB	26328834	26269342	24364551	92.8	1323677	5.0
3	–	ICV	22553960	22509141	20747321	92.2	1048927	4.7
4	–	PB	22298387	22246905	20498481	92.1	873110	3.9
4	–	ICV	21880358	21833012	20326901	93.1	965338	5.2
5	–	PB	26322126	26257852	23915158	91.1	965338	5.7
5	–	ICV	23278256	23231904	21264647	91.5	1096951	4.7
6	1	PB	20051147	17459925	16706238	95.7	1033345	6.2
6	2	PB	20309821	17681238	16935538	95.8	1097540	6.5
6	1	ICV	18754089	17915042	16608514	92.7	815870	4.9
6	2	ICV	20982964	20028587	18542443	92.6	1196745	6.5
7	–	PB	24093748	24039957	22311230	92.8	830200	3.5
7	–	ICV	20544146	20515344	18971171	92.5	927826	4.5
8	1	PB	20329228	17660831	16867545	95.5	770714	4.6
8	2	PB	21073654	18326128	17481457	95.4	762102	4.4
8	1	ICV	20096314	19197461	18004883	93.8	751745	4.2
8	2	ICV	23087897	21995135	20627314	93.8	829144	4.0
9	–	PB	15868370	15831194	14637126	92.5	810996	5.1
9	–	ICV	21946355	21902385	20028060	91.4	1008152	4.6
10	–	PB	23181092	22173624	20866802	94.1	1217332	5.8
10	–	ICV	17870903	17147527	15779357	92.0	816491	5.2
11	1	PB	29153476	27883749	26522168	95.1	1227177	4.6
11	2	PB	24411524	23359067	22248361	95.2	955078	4.3
11	1	ICV	17831469	17102361	15725642	92.0	806102	5.1
11	2	ICV	26194068	25092879	23191445	92.4	1253006	5.4
12	1	PB	19426072	16928040	16147240	95.4	1101792	6.8
12	2	PB	21180755	18462166	17604588	95.4	1177815	6.7
12	1	ICV	26198482	25071815	23346127	93.1	1286444	5.5
12	2	ICV	24072525	23043123	21436647	93.0	1245385	5.8
13	–	PB	19591604	19543700	17648053	90.3	993927	5.1
13	–	ICV	18725483	18661911	16790989	90.0	965338	5.2
14	–	PB	22205068	22154209	20330845	91.8	965338	5.2
14	–	ICV	25017698	24974498	22905236	91.7	1239203	5.0
Mean			22312176	21448832	19963224	93.1	1013904.8	5.0

PB: Peripheral blood; ICV: Ileocecal valve

**Supplementary figure 1. Volcano plots showing the DE genes ( $\log_2$  fold change versus  $-\log$  (p value) for each sample and correspondent replica. The absence of red spots in the plots indicated the lack of DE genes between each sample and corresponding replica.**

