Combined effects of CXCL8 (IL-8) and CXCR2 (IL-8R) gene polymorphisms on deregressed MACE EBV indexes of milk-related traits in Simmental bulls

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Supplementary File

Table S1. Information on allelic diversity of the CXCL8 and CXCR2 genes in Simmental breed.

Name	Gene	Reference SNP	Mutation type on ARS-UCD1.2	PIC	Hetero-zygosity	Allelic Diversity	Chi-Sq	*P* > Chi-Sq
			Chr 6 NC_037333					
SNP 1	IL8-697	rs110291328	g.88810697 G>A	0.2493	0.2903	0.2919	0.0009	0.9762
SNP 2	IL8-2367	rs133728598	g.88812367 A>G	0.2340	0.2581	0.2706	0.0660	0.7972
SNP 3	IL8-3179	rs134771119	g.88813179 G>A	0.2688	0.2667	0.3200	0.8333	0.3613
SNP 4	IL8-3663	rs41255759	g.88813663 T>C	0.2493	0.2903	0.2919	0.0009	0.9762
SNP 5	IL8-3789	rs41255762	g.88813789 G>A	0.2493	0.2903	0.2919	0.0009	0.9762
			Chr 2 NC_037329					
SNP 6	CR2-827	rs378507858	g.106184827 C>A	0.1373	0.0968	0.1483	3.7406	0.0531
SNP 7	CR2-2132	rs43316867	g.106186132 G>A	0.2765	0.2903	0.3314	0.4768	0.4899
SNP 8	CR2-7583	Novel	g.106191583 T>C	0.3740	0.9355	0.4979	23.9403	<.0001
SNP 9	CR2-7587	Novel	g.106191587 C>T	0.3740	0.9355	0.4979	23.9403	<.0001
SNP 10	CR2-7595	Novel	g.106191595 A>G	0.3740	0.9355	0.4979	23.9403	<.0001
SNP 11	CR2-7649	rs132993381	g.106191649 A>G	0.3578	0.7419	0.4667	10.7817	0.0010
SNP 12	CR2-7733	rs460354284	g.106191733 C>T	0.3619	0.7742	0.4745	12.3657	0.0004
SNP 13	CR2-7807	rs211042414	g.106191807 T>C	0.3476	0.6774	0.4480	8.1327	0.0043
SNP 14	CR2-8040	rs209319366	g.106192040 A>C	0.3684	0.8387	0.4870	16.1698	<.0001

SNP 15	CR2-8084	Novel	g.106192084 G>A	0.2634	0.3871	0.3122	1.7856	0.1815
SNP 16	CR2-8177	Novel	g.106192177 G>C	0.3619	0.7742	0.4745	12.3657	0.0004
SNP 17	CR2-8291	rs137158755	g.106192291 T>C	0.2174	0.2903	0.2482	0.8939	0.3444
SNP 18	CR2-8384	rs379291975	g.106192384 C>T	0.3530	0.7097	0.4579	9.3775	0.0022
SNP 19	CR2-8450	Novel	g.106192450 C>T	0.3530	0.7097	0.4579	9.3775	0.0022
SNP 20	CR2-8462	rs378981627	g.106192462 A>G	0.2634	0.3871	0.3122	1.7856	0.1815
SNP 21	CR2-8510	rs136322588	g.106192510 G>A	0.3726	0.9032	0.4953	21.0242	<.0001
SNP 22	CR2-8540	rs133668709	g.106192540 C>T	0.3347	0.6129	0.4251	6.0525	0.0139
SNP 23	CR2-8622	rs379308351	g.106192622 G>A	0.3530	0.7097	0.4579	9.3775	0.0022
SNP 24	CR2-8724	rs208730379	g.106192724 G>A	0.3476	0.6774	0.4480	8.1327	0.0043
SNP 25	CR2-8803	Novel	g.106192803 A>G	0.3655	0.8065	0.4813	14.1527	0.0002
SNP 26	CR2-8841	rs133789177	g.106192841 G>A	0.3476	0.6774	0.4480	8.1327	0.0043
SNP 27	CR2-9203	rs43322997	g.106193203 C>T	0.1802	0.2258	0.2003	0.5021	0.4786
SNP 28	CR2-9625	rs43322998	g.106193625 C>G	0.2765	0.2903	0.3314	0.4768	0.4899

Table S2

Linkage disequilibrium between the SNPs of the CXCL8-CXCR2 genes, identified in the Simmenthal cattle breed.

Name	SNP 2	SNP 3	SNP 4	SNP 5	SNP 6	SNP 7	**SNP 8**	**SNP 9**	**SNP 10**	SNP 11	SNP 12	SNP 13	SNP 14	**SNP 15**	**SNP 16**	SNP 17	SNP 18	**SNP 19**	SNP 20	SNP 21	SNP 22	SNP 23	SNP 24	**SNP 25**	SNP 26	SNP 27	SNP 28
SNP 1	0.94	0.95	1	1	0.14	0.245	0.11	0.11	0.11	0.36	0.29	0.33	0.39	0.15	0.29	0.19	0.36	0.20	0.23	0.02	0.08	0.34	0.33	0.25	0.33	0.11	0.24
SNP 2		0.89	0.94	0.94	0.13	0.23	0.10	0.10	0.10	0.34	0.24	0.31	0.35	0.03	0.24	0.18	0.31	0.14	0.21	0.01	0.05	0.33	0.31	0.19	0.31	0.06	0.23
SNP 3			0.95	0.95	0.15	0.26	0.26	0.26	0.26	0.39	0.24	0.06	0.31	0.14	0.24	0.21	0.32	0.18	0.25	0.03	0.06	0.38	0.06	0.19	0.06	0.18	0.26
SNP 4				1	0.14	0.24	0.11	0.11	0.11	0.36	0.29	0.33	0.39	0.15	0.29	0.19	0.36	0.20	0.23	0.02	0.08	0.34	0.33	0.25	0.33	0.11	0.24
SNP 5					0.14	0.24	0.11	0.11	0.11	0.36	0.29	0.33	0.39	0.15	0.29	0.19	0.36	0.20	0.23	0.02	0.08	0.34	0.33	0.25	0.33	0.11	0.24
SNP 6						0.58	0.05	0.05	0.05	0.19	0.07	0.24	0.25	0.43	0.07	0.54	0.22	0.05	0.15	0.27	0.02	0.05	0.24	0.08	0.23	0.11	0.58
SNP 7							0.20	0.20	0.20	0.44	0.28	0.25	0.19	0.51	0.28	0.80	0.38	0.21	0.25	0.28	0	0.35	0.25	0.28	0.25	0.18	1
SNP 8								1	1	0.72	0.75	0.67	0.83	0.46	0.75	0.44	0.70	0.70	0.46	0.85	0.62	0.70	0.67	0.77	0.67	0.33	0.20
SNP 9									1	0.72	0.75	0.67	0.83	0.46	0.75	0.44	0.70	0.70	0.46	0.85	0.62	0.70	0.67	0.77	0.67	0.33	0.20
SNP 10										0.72	0.75	0.67	0.83	0.46	0.75	0.44	0.70	0.70	0.46	0.85	0.62	0.70	0.67	0.77	0.67	0.33	0.20
SNP 11											0.61	0.58	0.65	0.38	0.61	0.54	0.57	0.57	0.64	0.70	0.46	0.97	0.58	0.63	0.58	0.46	0.44
SNP 12												0.57	0.68	0.39	1	0.33	0.69	0.86	0.31	0.72	0.53	0.59	0.57	0.97	0.57	0.28	0.28
SNP 13													0.61	0.68	0.57	0.25	0.53	0.53	0.35	0.70	0.93	0.51	1	0.59	1	0.26	0.25
SNP 14														0.43	0.68	0.35	0.63	0.63	0.42	0.86	0.58	0.63	0.61	0.70	0.61	0.11	0.19
SNP 15															0.39	0.58	0.36	0.36	0.24	0.44	0.63	0.36	0.68	0.40	0.68	0.17	0.51
SNP 16																0.33	0.69	0.86	0.31	0.72	0.53	0.59	0.57	0.97	0.57	0.28	0.28
SNP 17																	0.31	0.31	0.20	0.37	0.13	0.40	0.25	0.34	0.25	0.15	0.80
SNP 18																		0.57	0.36	0.73	0.49	0.55	0.53	0.64	0.53	0.26	0.38
SNP 19																			0.36	0.67	0.49	0.55	0.53	0.90	0.53	0.26	0.21
SNP 20																				0.44	0.33	0.66	0.35	0.45	0.35	0.73	0.25
SNP 21																					0.73	0.67	0.70	0.75	0.70	0.32	0.28
SNP 22																						0.49	0.93	0.55	0.93	0.24	0
SNP 23																							0.51	0.61	0.51	0.48	0.35
SNP 24																								0.59	1	0.26	0.25
SNP 25																									0.59	0.18	0.28
SNP 26																										0.26	0.25
SNP 27																											0.18