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## Supplementary Material

### **The novel porcine gene early growth response 4 (*Egr4*) is differentially expressed in the ovaries of Erhualian and Pietrain pigs**

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Query 619	AGGTGACTTCTGAGCTGGGCTTGGAGCTGCGGGCC	678	Query 1819	GCCAGTGATGAGAAGAAACGACAGCAAGGTGCACCTAACGAGAAAGCCGCGCCGA	1878
Sbjct 381558	AGGTGACTTCTGAGCTGGGCTTGGAGCTGCGGGCCGGGGGGGACTTACGCGACT	381617	Sbjct 382758	GCCAGTGATGAGAAGAAACGACAGCAAGGTGCACCTAACGAGAAAGCCGCGCCGA	382817
Query 679	CTGCTTCTAGAGGGGCTGCACCCACGCCCTCCAGGCTCAGCTACAGTGTAGCT	738	Query 1879	GGAGGGCTCAAGGGCTTGGCTTTACTGTTGGGCTTCTCTGCGGCTGTAAAGG	1938
Sbjct 381618	CTGCTTCTAGAGGGGCTGCACCCACGCCCTCCAGGCTCAGCTACAGTGTAGCT	381677	Sbjct 382818	GGAGGGCTCAAGGGCTTGGCTTTACTGTTGGGCTTCTCTGCGGCTGTAAAGG	382877
Query 739	CTTCATCCAGCAGTACCCGACATCCGCAGCCCGGAGCAGCTCTTCAACCTCATGTC	798	Query 1939	GTAAATGGGTTTGTAGATTGGGGCCGCCGCCCTGGCGCCAAAGAAACTTGGCCCG	1998
Sbjct 381678	CTTCATCCAGCAGTACCCGACATCCGCAGCCCGGAGCAGCTCTTCAACCTCATGTC	381737	Sbjct 382878	GTAAATGGGTTTGTAGATTGGGGCCGCCGCCCTGGCGCCAAAGAAACTTGGCCCG	382937
Query 799	GGGCATCTAGGCTGGCAGCTTTCCCGGGGCTGAGGCGGCAGCATCCCGGCTCTCTCT	858	Query 1999	CCCCGCTCTCCGCTCTCTTCTTCTACTTCTCCGGCAGCCCTGGGGGGGCTTGT	2058
Sbjct 381738	GGGCATCTAGGCTGGCAGCTTTCCCGGGGCTGAGGCGGCAGCATCCCGGCTCTCTCT	381797	Sbjct 382938	CCCCGCTCTCCGCTCTCTTCTTCTACTTCTCCGGCAGCCCTGGGGGGGCTTGT	382997
Query 859	GGAGCCCTCTTCCCGCAGGTTCCGAGCCCTTGTGCCAGGCTGCCAGACCTTTTCT	918	Query 2059	CCGGCTCCAGTTCCCTTGAAGCCGCCGCCACAGCCCTTGTTCAGCAGCAGCTTCTG	2118
Sbjct 381798	GGAGCCCTCTTCCCGCAGGTTCCGAGCCCTTGTGCCAGGCTGCCAGACCTTTTCT	381857	Sbjct 382998	CCGGCTCCAGTTCCCTTGAAGCCGCCGCCACAGCCCTTGTTCAGCAGCAGCTTCTG	383057
Query 919	CCCGGATCTGGGGCTGCGGCTTCCAGAGGGGCTTGGGAGGCTTCCGCTGGCGGG	978	Query 2119	GACAGCTCCCGGCTCCCGGCGAGTCCCGAGTCAGAGCCGCTTACAGAAAGATGCGCT	2178
Sbjct 381858	CCCGGATCTGGGGCTGCGGCTTCCAGAGGGGCTTGGGAGGCTTCCGCTGGCGGG	381917	Sbjct 383058	GACAGCTCCCGGCTCCCGGCGAGTCCCGAGTCAGAGCCGCTTACAGAAAGATGCGCT	383117
Query 979	CGTCCCTCACAATGCTGTATGAGCTCATCTTCCCGCAGGCTCAAGCCAGGCT	1038	Query 2179	TCACCCACTGAGTAGGCACATCCCTGGGACTTAATACAATCTTTTAACTGGCGCAC	2238
Sbjct 381918	CGTCCCTCACAATGCTGTATGAGCTCATCTTCCCGCAGGCTCAAGCCAGGCT	381977	Sbjct 383118	TCACCCACTGAGTAGGCACATCCCTGGGACTTAATACAATCTTTTAACTGGCGCAC	383177
Query 1039	TCGGCTCTCCGCTTCCCGCAGGCTGACACTGCCAACCTTCAAAGTCCCTACGC	1098	Query 2239	CCACGCCCTCTTtagcccccccccccaagagcctggggcagccggcagcctggct	2297
Sbjct 381978	TCGGCTCTCCGCTTCCCGCAGGCTGACACTGCCAACCTTCAAAGTCCCTACGC	382037	Sbjct 383178	CCACGCCCTCTTtagcccccccccccaagagcctggggcagccggcagcctggct	383237
Query 1099	GCCGTGGGAGCTCTCAAGCCGGGCTGCAGGAGCTGTGGATCAAGAGGCTACCA	1158	Query 2298	TGCGGGGATTTGTACAGCAATGTGTTTCAGCAGCATTGTTGTAAGCTTTTGTCT	2357
Sbjct 382038	GCCGTGGGAGCTCTCAAGCCGGGCTGCAGGAGCTGTGGATCAAGAGGCTACCA	382097	Sbjct 383238	TGCGGGGATTTGTACAGCAATGTGTTTCAGCAGCATTGTTGTAAGCTTTTGTCT	383297
Query 1159	GGCGCTTCAGAGGGGCTTCCCGGCTGGGGGCAAGATTGAAGACTGCTGTCCAT	1218	Query 2358	TTGgggttatttctctttttgtgtgttaatttttgaagagcagcctactctcaagca	2417
Sbjct 382098	GGCGCTTCAGAGGGGCTTCCCGGCTGGGGGCAAGATTGAAGACTGCTGTCCAT	382157	Sbjct 383298	TTGgggttatttctctttttgtgtgttaatttttgaagagcagcctactctcaagca	383357
Query 1219	CAGCTGCCCGGGAGTTCGGGCTGCCCGCACCAGCAGACTTACACCTCGGGGCTA	1278	Query 2418	GTTGacaaaactgtttatttttcaaatataaaatcctgtctaaaagctta	2478
Sbjct 382158	CAGCTGCCCGGGAGTTCGGGCTGCCCGCACCAGCAGACTTACACCTCGGGGCTA	382217	Sbjct 383358	GTTGacaaaactgtttatttttcaaatataaaatcctgtctaaaagctta	383408
Query 1279	CGAGCTTTCCCGCTGGCCGAGTGAATAGGGGAGGGGAGCCGAGGGCTCCGAGGGCT	1338	Query 1	GGGGTCCACGCTTGGGA	60
Sbjct 382218	CGAGCTTTCCCGCTGGCCGAGTGAATAGGGGAGGGGAGCCGAGGGCTCCGAGGGCT	382277	Sbjct 380539	GGGGTCCACGCTTGGGA	380598
Query 1339	CTTGACCCCTCtagtgggggggggggagcggcgaagcggagatttctagatgg	1398	Query 61	GGGGGAGCTCACAGCCGAGTTTCTTTTGGGAGTCCCGGGCAGACATCTGTGTCC	120
Sbjct 382278	CTTGACCCCTCtagtgggggggggggagcggcgaagcggagatttctagatgg	382337	Sbjct 380599	GGGGGAGCTCACAGCCGAGTTTCTTTTGGGAGTCCCGGGCAGACATCTGTGTCC	380658
Query 1399	TACGCAACCGCAGCTTTCCCGGCTGGGCTCCGAGGCCACCGGACTTCCCGAAACC	1458	Query 121	ATGTTTGGGCAITTAGCTCACGGCGGACGGGCGGGGCTCCCGAAATGCAATGGCCCG	180
Sbjct 382338	TACGCAACCGCAGCTTTCCCGGCTGGGCTCCGAGGCCACCGGACTTCCCGAAACC	382397	Sbjct 380659	ATGTTTGGGCAITTAGCTCACGGCGGACGGGCGGGGCTCCCGAAATGCAATGGCCCG	380718
Query 1459	TCTGTTGGCGACATCCCGGGAGCAGCGGGGCTGCCAGGCTCTTGGACCGCGCCGCC	1518	Query 181	GGGAGTCCGAAAGCCCTGAGCCAGCCGCCCGCTGTATATAAGT	240
Sbjct 382398	TCTGTTGGCGACATCCCGGGAGCAGCGGGGCTGCCAGGCTCTTGGACCGCGCCGCC	382457	Sbjct 380719	GGGAGTCCGAAAGCCCTGAGCCAGCCGCCCGCTGTATATAAGT	380778
Query 1519	CGGCCATTCCCGCAGCCAAAGGAGGCGCAAGGGGCGCCGGGGGCAAGTGCAGCGC	1578	Query 241	GGGGGAGCCGGTTGGGCTTTGGAGAGCGAGGAACGCCATCCGAGCGTCCCAAGGA	300
Sbjct 382458	CGGCCATTCCCGCAGCCAAAGGAGGCGCAAGGGGCGCCGGGGGCAAGTGCAGCGC	382517	Sbjct 380779	GGGGGAGCCGGTTGGGCTTTGGAGAGCGAGGAACGCCATCCGAGCGTCCCAAGGA	380838
Query 1579	ADGCTGCTTCCGCTCGCCCTCGCCCATGCCAAGCCCTTGCCTGCCGGTGGAGCTGCGT	1638	Query 301	GCAAGGGGCTTCAGCCACCCCTATCCCGAAGCTTTCCAGAGGTGAGAGCCAGAG	360
Sbjct 382518	ADGCTGCTTCCGCTCGCCCTCGCCCATGCCAAGCCCTTGCCTGCCGGTGGAGCTGCGT	382577	Sbjct 380839	GCAAGGGGCTTCAGCCACCCCTATCCCGAAGCTTTCCAGAGGTGAGAGCCAGAG	380898
Query 1639	GGCAGCTTTGGGCTCCGAGAGCTCAACCGCCACTTGGCATCCACACCGCCACAA	1698	Query 361	CCAGGAACCGGGCTCTGGGCTGCAAGGCGCGGGGTGCCGACTADCGCCCTCCCG	420
Sbjct 382578	GGCAGCTTTGGGCTCCGAGAGCTCAACCGCCACTTGGCATCCACACCGCCACAA	382637	Sbjct 380899	CCAGGAACCGGGCTCTGGGCTGCAAGGCGCGGGGTGCCGACTADCGCCCTCCCG	380958
Query 1699	ACCTTCCAGTCCGCACTTCCGCTCCGCAACTTCAAGCCAGCGACCACTTACAACACA	1758	Query 421	CCATCCGCGCACCATCCGAGCCAGCGGGCGAGGCCCGCGAGCCCGCAGCGCCGCG	480
Sbjct 382638	ACCTTCCAGTCCGCACTTCCGCTCCGCAACTTCAAGCCAGCGACCACTTACAACACA	382697	Sbjct 380959	CCATCCGCGCACCATCCGAGCCAGCGGGCGAGGCCCGCGAGCCCGCAGCGCCGCG	381018
Query 1759	CGTGGCAGCCACAGGGCGAGAAGCCCTTGTCTGGAGGTGTGGGCGCGGCTTGC	1818	Query 481	AGCCATGCTCCACTTAGCGAGTTTCTGGCCCGAGCGCTTGTAGTGAAGTCCACCGA	540
Sbjct 382698	CGTGGCAGCCACAGGGCGAGAAGCCCTTGTCTGGAGGTGTGGGCGCGGCTTGC	382757	Sbjct 381019	AGCCATGCTCCACTTAGCGAGTTTCTGGCCCGAGCGCTTGTAGTGAAGTCCACCGA	381078
			Query 541	AGGCTGTGCTCCGAAACAACTGAATGCCAGACTGCCACAGGAGCCCAACCGC	600
			Sbjct 381079	AGGCTGTGCTCCGAAACAACTGAATGCCAGACTGCCACAGGAGCCCAACCGC	381138
			Query 601	AGCCTTGGCTATCCGGGAGGT	622
			Sbjct 381139	AGCCTTGGCTATCCGGGAGGT	381180

Fig. S1.

NCBI UniGene ORGANIZED VIEW OF THE TRANSCRIPTOME

Search UniGene Ssc.10361 Go Clear

NCBI UGID:450217 UniGene Ssc.10361 *Sus scrofa* (pig) LOC100516906 Links

**Early growth response protein 4-like (LOC100516906)**

Pig protein-coding gene LOC100516906. Represented by 8 ESTs from 6 cDNA libraries. [UniGene 450217 - Ssc.10361]

**SELECTED PROTEIN SIMILARITIES**

Comparison of cluster transcripts with RefSeq proteins. The alignments can suggest function of the cluster.

Best Hits and Hits from model organisms		Species	Id(%)	Len(aa)
XP_003125057.1	PREDICTED: LOW QUALITY PROTEIN: early growth response protein 4-like	<i>S. scrofa</i>	100.0	589
NP_001956.3	early growth response protein 4	<i>H. sapiens</i>	88.3	588
NP_065621.1	early growth response protein 4	<i>M. musculus</i>	86.8	477
NP_001163643.1	stripe, isoform C	<i>D. melanogaster</i>	73.9	115
NP_001079336.1	Wilms tumor protein homolog B	<i>X. laevis</i>	49.6	139
NP_001041062.1	Protein EGRH-3	<i>C. elegans</i>	48.2	114
Other hits (2 of 32) [Show all]		Species	Id(%)	Len(aa)
NP_001035587.1	early growth response protein 4	<i>B. taurus</i>	93.8	481
XP_001142546.1	PREDICTED: early growth response protein 4	<i>P. troglodytes</i>	88.6	588

**Fig. S2.**