

DNA methylation differences of the *BPI* promoter among pig breeds and the regulation of gene expression

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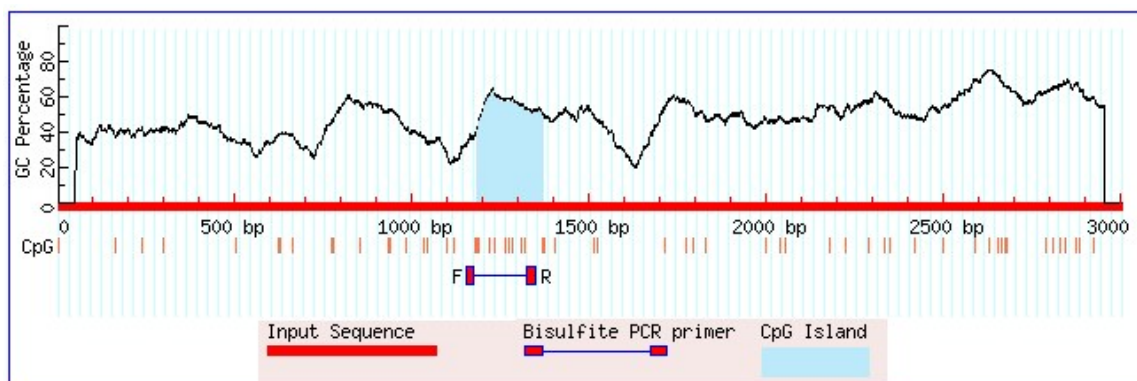
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Supplementary Table S1 Sequences of primer used in PCR assays.

Primer	Sequence (5' - 3')	Length (bp)
<i>BPI</i> Normal PCR primer	F: TTTCTGCTGTGCCATGACG R: CCCCTCACCCCATCTTGTT	489
<i>BPI</i> BSP PCR primer	F: TTTTTGTTTTTTTTGTTTTTTTT R: ATTTAATCCCTAACCTTACTCAATAC F:	195
<i>BPI</i> BSP PCR primer	TGAGGTATAGTAAAAATAAATTAAAGTAAA R: AATTATAAAAATAATTACCACAACCTAAACTA	432
<i>BPI</i> BSP PCR primer	F: TATTGAGTAAGGTTAGGGATTAAATTTATA R: TAAATACCTCAAAATTCATTATATTTTTCT	366
<i>BPI</i> RT-PCR primer	F: ATATCGAATCTGCGCTCCGA R: TTGATGCCAACCATTCTGTCC	136
<i>GAPDH</i> RT-PCR primer	F: ACATCATCCCTGCTTCTACTGG R: CTCGGACGCCTGCTTCAC	187

Supplementary Figures



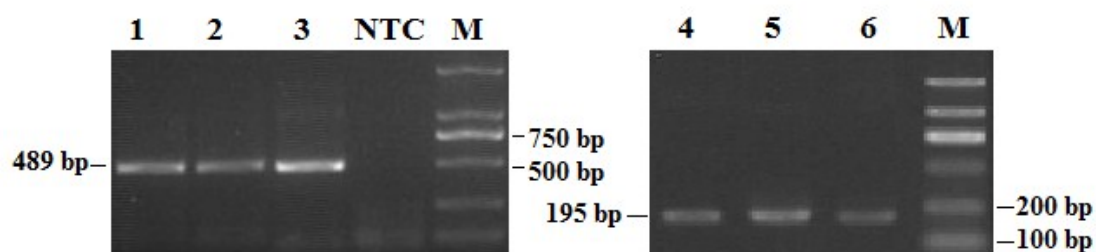
Supplementary Figure S1. CpG island prediction in the promoter of the pig *BPI* gene.

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tttttgccttttgccttttcttgagccgccccgcggcatatggaggttcccaggctagg
      ==Elk-1==          1 2 3
                        =====AP-2=====
agtctaatacggagctgtagctgccggcctacaccacagccacagcaactcgggaccaag
      4 5 6
                        =====NF-1=====
ccacgtttgcgacctacaccacagttcatggcaacgctggatccttaacgcactgagcaa
      7 8 9 10
                        =====Pax-3===== =R

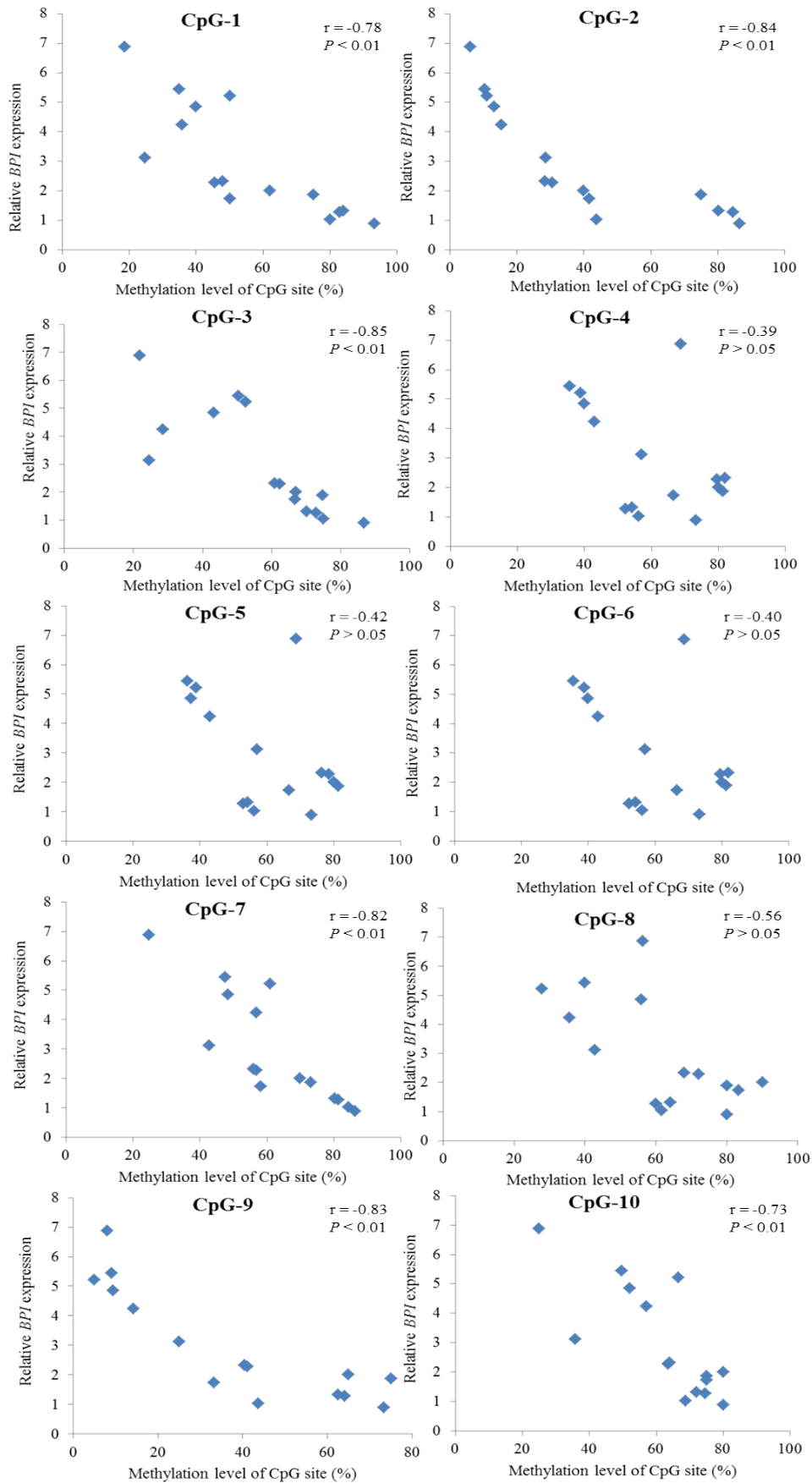
ggtcagggatcaaac
AR-alpha=
  
```

Supplementary Figure S2. Transcription factor binding sites prediction in the CpG island within the *BPI* promoter.



Supplementary Figure S3. Agarose gel electrophoresis (1%) of normal DNA and BSP DNA PCR products amplified from the duodenum of different pig breeds. 1-3: normal DNA

products; 4-6: BSP DNA products; M: DL2000 marker; NTC: no template control.



Supplementary Figure S4. Correlation analysis between relative *BPI* expression and methylation levels of the CpG sites.