

**Supplementary table S1. DMR regions of Breast and Endometrial cancers for HOXB2 gene.**

|                   | <b>Chromosome</b> | <b>Region start</b> | <b>Region end</b> | <b>Type</b> | <b>P-value</b>         |
|-------------------|-------------------|---------------------|-------------------|-------------|------------------------|
| Breast DMR 1      | chr17             | 43,973,504          | 43,974,504        | 1           | 0.0034                 |
| Breast DMR 2      | chr17             | 43,974,504          | 43,975,504        | 1           | 0.0024                 |
| Breast DMR 3      | chr17             | 43,975,504          | 43,976,504        | 1           | 1.00x10 <sup>-4</sup>  |
| Breast DMR 4      | chr17             | 43,976,504          | 43,977,504        | 1           | 0.0051                 |
| Endometrial DMR 1 | chr17             | 43,974,504          | 43,975,504        | 2           | 7.00 x10 <sup>-4</sup> |