

**Supplementary Table 2. PCR Primers and conditions**

All primers are listed in 5' to 3' orientation

**MSP Primers**

<u>Gene</u>	<u>Methylated Sense Primer</u>	<u>Methylated Antisense Primer</u>	<u>Unmethylated Sense Primer</u>	<u>Unmethylated Antisense Primer</u>	<u>Annealing Temperature</u>
APC	TATTGCGGAGTCCGGGTC	TCGACGAACTCCCGACGA	GTGTTTTATTGGGAGTGTGGGTT	CCAATCAACAACTCCCAACAA	53
BRCA1	TCGTGGTACGGAAAAGCGC	AAATCTCAACGAACTCACGCCG	TTGGTTTTTGGTAAATGGAAAAGTGT	CAAAAAATCTCAACAAACTCACACCA	60
CRBP1 (RBP1)	TTGGGAATTTAGTTGCTGCTGTTTC	AAACAACGACTACCGATACTACGCC	GTGTTGGGAATTTAGTTGTTGTTGTTT	ACTACAAAACAACAACACTACCAATACTACACA	60
Cyclin D (CCND1)	GGAAATCGTTGGGAGTTTTGTTTTT	GAAACCCGTAAAACGACGCCG	GGGAATTTGGGAGTTTTGTTTTT	AACTCTTCAAAACCATAAAACAACACA	60
DAP-kinase (DAPK)	GGATAGTCGGATCGAGTTAACGTC	CCCTCCCAAAACGCCGA	GGAGGATAGTTGGATTGAGTTAATGTT	CAAATCCCTCCCAACACCAA	60
E-Cadherin (CDH1)	TGTAGTTACGTAATTTTATTTAGTGGCGTC	CGAATACGATCGAATCGAACC	TGGTTGATGTTAGTATTTTATTTTATTTAGTGGTGT	ACACCAATAACAATCAAATCAAACCAA	60
ER (ESR1)	ACGAGTTTAAACGTCGCGGTC	ACCCCCAAACCGTTAAAAC	TGTTGTTTATGAGTTAATGTTGTTGTT	AAAAAACCCCCCAACCCATT	60
FANCF	AGTATTTGGGATTCGTTATCGTGC	GAATAAAACCATACCGACAAAACG	TATGTTAGTATTTGGGATTTTGTATTGTTG	ACAAATAAAACCATACCAACCAAAACA	60
FHIT	GCGGGTTTTGGGTTTTACGC	CGACGCCGACCCCACTAAA	GGGTGTGGGTTTTGGTTTTTATGT	CCATAAAACAACCAACCCCACTAAA	60
GATA-4	GTATGATTTGCGAGTTTTCGTTTACG	AACTCGCGACTCGAATCCCGG	TTTGATAGTTTTGATGTTTGTGTTTGT	CCCAACTCACAACCTCAAATCCCA	60
GATA-5	AGTTTCGTTTTAGGTTAGTTTTCCGGC	CCAATAACAATAAACGAAACGACCG	TGGAGTTTTTTTTAGGTTAGTTTTTGGT	CAAAACAATAACAATAACAACAACAACA	60
GST-Pi	TTCCGGGTGTAGCGGTCGTC	GCCCCAATACTAAATCAGCACG	GATGTTTTGGGGTGTAGTGGTTGT	CCACCCCAATACTAAATCACAACA	60
HIC-1	TCGGTTTTCCGCTTTTTGTTCTGT	AACCGAAAACATCAACCCCTCG	TTGGGTTGGTTTTGTGTTTTG	CACCCCTAACACCACCCCTAAC	60
MLH1	ACGTAGACGTTTTATTAGGGTCGC	CCTCATCGTAACCTACCCGCG	TTTTGATGATAGTTTTATTAGGGTTGT	ACCACCTCATCATAACTACCCACA	60
O6-MGMT	TTTTCGACGTTGCGTAGGTTTTCCG	GCATCTTTCGAAAACGAAAACG	TTTATAGAGGGTGGGGTGGATTGT	AACTCCACACTCTTCCAAAAACAACA	60
p14 (CDKN2a)	GTGTTAAAGGGCGCGGTAGC	AAAACCCCTCACTCGCGACGA	TTTTTGGTGTAAAGGGTGGTGTAGT	CACAAAAACCCCTCACTCACAAACA	55
p15 (CDKN2b)	GGTTTTTATTTTGTAGAGCGAGGC	TAACCGCAAAATACGAACGCG	GGTTGGTTTTTATTTTGTAGAGTGAGGT	AACCACTTAACCAAAAATACAACAACA	60
p16 (CDKN2a)	TTATTAGAGGGTGGGGCGGATCCG	GACCCCGAACCGCGACCCGTAA	TTATTAGAGGGTGGGGTGGATTGT	CAACCCCAACCAACAACCATAA	60
p73 (TP73)	GGACGTAGCGAAAATCGGGGTTT	ACCCCGAACATCGACGTCGCG	AGGGGATGATAGTAAATTTGGGGTTT	ATCACAACCCCAACATCAACATCCA	60
RAR-b	TGTCGAGAACGCGAGCGATT	CGACCAATCCAACCGAAAACGA	TTGGGATGTTGAGAATGTGAGTGATT	CTTACTCAACCAATCCAACCAAAACA	60
RASSF1	GGGTTGTTTTGTTGTTTTCGTTC	TAACCCGATTAACCCGTACTTCG	GGGGTTTTGTTTTGTGTTTTGTTT	AACATAACCCCAATTAACCCATACTTCA	60
SFRP1	TGTAGTTTTCGGAGTTAGTGTGCGCG	CCTACGATCGAAAACGACGCGAACC	GTTTTGTAGTTTTTGGAGTTAGTGTGTT	CTCAACCTACAATCAAAAACAACAACA	60
SFRP2	GGGTCGGAGTTTTTTCGGAGTTGCGC	CCGCTCTCTTCTGCTAAATACGACTCG	TTTTGGGTTGGAGTTTTTGGAGTTGTT	AACCACTCTCTTCAATAACAACAACA	60
SFRP4	GGGTGATGTTATCGTTTTTGTATCGAC	CCTCCCTAACGTAACCTCGAAAACG	GGGGGTGATGTTATTTGTTTTGATTGAT	CACCTCCCTAACATAAATAACAACAACA	60
SFRP5	AAGATTTGGCGTTGGCGGGACGTTT	ACTCCAACCGAACCTCGCGTACG	GTAAGATTTGGTGTGGGTGGGATGTT	AAAACCTCAACCCAAACCTCACCATACA	60
SOCS-1	TTCCGCTGATTTTTAGTTCGGTC	CGACACAACCTACAACGACCG	TTATGAGATTTGTGTGATTTTTAGTTGGTT	CACTAACAACAACAACCTCACAACAACA	55
Thrombo (THBS1)	TCGGACGTATAGGTAATTTTTCCG	ATCCTCGACGACCCGCCG	TTTTTATTTGGATGTATAGGTAATTTTTGT	CAACTTTAATCCTCAACAACCAACA	55
TIMP-3	CGTTTTGTTATTTTTGTTTTCGGTTTT	CCGAAAACCCCGCCTCG	TTTTGTTTTGTTATTTTTGTTTTGTTTTT	CCCCAAAAACCCCACTCA	60
TMS-1 (PYCARD)	GCGGTTGTAGCGGGGTGAGC	CGCATCAAAAATAACGTCGCG	TTGTGGTGTGATGGGGTGAGT	CCAACACATCAAAAATAACATCACA	60

**Real-time RT/PCR primers**

<u>Gene Name</u>	<u>Forward Primer</u>	<u>Reverse Primer</u>	<u>Annealing Temperature</u>
BRCA-1	TTGCGGGAGGAAAATGGGTAGTTA	GTTGATCTGTGGCATGTTGGTGA	56
Bmi-1	TATTGTTGTTACCTGGAGACC	TTTGAAAAGCCCTGGAACTAA	49
CRBP1	CATCCGACGCTGAGCACTTTTAG	CACGCCCTCCTTCTACCCCTTCT	58
Cyclin D	GGTGGTCTGGGGAAGTTGAAGTG	TCGACGGTGGGTACATGGCAAACT	59
Cyclin D	GGTGGTCTGGGGAAGTTGAAGTG	TCGACGGTGGGTACATGGCAAACT	59
DAPK1	CGCTGACCACGACGAAAAGA	GGTGGAGCTGCTGGATGAAGAGT	58
E-cadherin (CDH-1)	CCGCGGCGCTCTGTAGGAA	AGGGCTCTTTGACCACCGCTCTC	57
EZH2	CCGCTGAGGATGTGGATACT	ACAAGGCTGCCGTGGATGAT	55
GAPDH	GAAGTCCGAGTCAACGGATTT	ATGGGTGGAATCATATTGGAAC	52-60
GATA-4	GGCCGCCCGACACCCCAATCT	ATAGTGACCCGTCCTCACTCG	56
GATA-5	CCTGGCGCTCTACCAACA	GGCGCGGGCGGACGAGGAC	58
GST-pi	GTTTTCCGCCCGCAGTCTTC	CCCGTATAGGCAGGAGGCTTTGAG	62
MGMT	CACCATCCGTTTTCCAGCAAGAG	ACGGGATGAGGATGGGGACAGGAT	59
p14	GAAAGGCCCTCGAAAAGTCC	GGCGGTTATCTCCTCCTCCTCA	54
p15	AGCCGCCCAACGACTTTATTTT	GTTATTTCCCGTGGCTCCTCCTT	58
p16	CGGGGTGCGGTAGAGGA	GCGCTGCCATCATCAT	58
p73	AGGTGCGAGGCCGGGAGAACTTTG	AGGACGGGGGCTGAGGTGACTCG	61
RAR-b2	CGCCCCGGCTGGATTGG	TCGAGGGGGAGGAAGTGGAGATG	58
sfmbt RT A	AGGAGAAAAGAGCGGAAAATGTT	GCTCGGATGTACTGCCTTCACTTA	55

<b>sFRP1</b>	GGCCATCTACCCGTGTCG	GATGGCTCAGATTCAACTCGT	60
<b>sFRP2</b>	AAGCCTGCAAAAATAAAATGATG	TGTAATGGTCTTGCTCTGGTCT	53
<b>sFRP4</b>	TCTATGACCGTGCGGTGTC	ACCGATCGGGCTTAGGGCTTTAC	56
<b>sFRP5</b>	ACCGCGCTCCAGTGACCA	TCTCCTTGATGCGCATTTTGACCA	57
<b>Suz12</b>	GAGGCGGCTTCGGGGTTTCG	GACGTGCTCCATTTTCGGCTTCT	58
<b>Timp-3</b>	GGCGGCAGCAGCGGCAATGAC	TACCAGCTTCTCCACCACCTT	62

### ChIP primers

<u>Gene Name</u>	<u>Forward Primer</u>	<u>Reverse Primer</u>	<u>Annealing Temperature</u>	<u>Additions</u>
<b>CDH1</b>	AACAAAAGAACTCAGCCAAGTG	ACGCCACTGAGAGGGGGTGC		57 10% DMSO
<b>GATA4</b>	GGGCGGGGAGGGAGAAAGGGAAC	GTGCGCGGCCCCCGCTACAC		61 1.5x Q solution
<b>GATA5</b>	GAAGCCCTCGGCCCGCCCGTCTA	CTCCCCGCGCCCGCCCTTCT		67 1.5x Q solution
<b>p15</b>	GCTAACGACCGGCCGCTCGGCCAC	TCCCACGCTGCTCCGGCGCACTCT		61 1.5x Q solution
<b>p16</b>	TGGCTGGTCACCAGAGGGTG	GACCGTAACTATTCGGTGCG		56 2x PCR enhancer, Platinum Taq
<b>RASSF1A</b>	GATCACGGTCCAGCCTCTGC	CTCGAGCCTTCACTTGGGGT		58
<b>sFRP1</b>	AATTTTCATGGGTTTGCAAGTATGA	TAAATAAAAGGGGAGGAGGAAAG		52
<b>sFRP2</b>	GCTGCTGAACGGTGGCTGGAGATT	CAGGCATGAGTGGGAGAGGGTGTG		62
<b>sFRP5</b>	GCTGAGGGAGTTTATGCAATGTGC	CACCTCCAGGGCCAGGATAGTCTA		56