SUPPLEMENTARY INFORMATION

Table S1. Sequences of primers used.

Figure S1. CpG density in THE1D LTR copies. The number of CpG dinucleotides in all THE1D LTR genomic copies is represented as a histogram.

Figure S2. Correlation of DNA methylation and expression from the IL2RB LTR at each CpG site in PBMC and placenta.

Figure S3. DNA methylation of the IL2RB LTR following 5azaC treatment in JEG-3 and U87-MG cells. Filled circles are methylated sites and open circles are unmethylated.

Figure S4. DNA methylation of the IL2RB LTR of first and second trimester trophoblast (T) and mesenchyme (M) samples (two each). Filled circles are methylated sites and open circles are unmethylated.

Figure S5. Western blot on positive control cells (human IL-2RB transfected 293T) and placenta samples. A. Positive control with anti-IL2RB from Santa Cruz and anti-ACTIN. B. Positive control with anti-IL2RB from Abcam and anti-ACTIN. C. Placenta samples with anti-IL2RB from Abcam and anti-GRB2.

Table S1 : sequence of primers

qRT-PCR

Primer	Sequence	Region
IL2RB-q3s	TTCCTGGCTCCACCCTGT	IL2RB exon 2 fwd
IL2RB-q4as	AGAAGCATGTGAACTGGGAAGT	IL2RB exon 3 rev
IL2RB-q5s	CACCACGATTGGCTTCCTT	LTR1 fwd
IL2RB-q9s	ATGTGGAACCGGCTTCCTT	LTR2 fwd
IL2RB-q7s	ACCGGGGAGGACTGGAGA	IL2RB exon 1b fwd
IL2RB-q6as	CTGCAGATGCCCAAGAGGTA	Exon 2 rev
IL2RA-q1s	GCTGTGTTTTCCTGCTGATCA	IL2RA exon 7 fwd
IL2RA-q2as	TGGGCTTCATGACTTCTGTTGT	IL2RA exon 8 rev
IL2RG-q1s	TTACTGAATACCACGGGAACTTTT	IL2RG exon 7 fwd
IL2RG-q2as	AGGCAGAGTCGTTCACTGTAGTCT	IL2RG exon 8 rev
IL15RA-q7s	CAGCCGCCAGGTGTGTAT	IL15RA exon 4/5
IL15RA-q8as	GGAGTTTGCCTTGACTTGAGGTA	IL15RA exon 6/7
IL2RB SD1-AdSA	CACCACGATTGGTTTCCTTG	Splice vector LTR1 fwd
IL2RB SD2-AdSA	ATGTGGAACCGGTTTCCTTG	Splice vector LTR2 fwd
Luc-1as	CCGTCTTCGAGTGGGTAGAAT	Luciferase rev

Bisulphite sequencing

Primer	Sequence	Equivalent unconverted	Region
IL2RB-LTR-BS-1s	GGATTTAGAATAGAAATTTTATGGTT	GGACCCAGAACAGAAATCTCATGGCC	LTR fwd
IL2RB-LTR-BS-2as	AACACAACAAATTTACCCTTAAA	AGGCACAACAGATTTGCCCTTAGG	LTR rev
IL2RB-LTR-BS-3s	TGAGATTGTTATTTTGTGGTTT	TGAGACTGCCATCCTGTGGCCC	Nested fwd
IL2RB-LTR-BS-4as	CCCTTAAACCAATAATATATAATCTAA	CCCTTAGGCCAATGATGTATGATCTGG	Nested rev
IL2RB-LTR-BS-7s	GTATGTGTTTTATGAAATGTTATGAAT	GTATGTGTCCTATGAAATGCCATGAAC	Downstream fwd
IL2RB-LTR-BS-8as	CTCTCCTACCAACATATAAAAATACC	CTCTCCTGCCAGCATGTGAAGGTGCC	Downstream rev
IL2RB-LTR-BS-5s	GTTATGAATTTTAATTATGTTTGTATAGAA	GCCATGAACCCCAACTATGCTTGTACAGAA	Downstream nested fwd
IL2RB-LTR-BS-6as	AACCTCCCCAACCATATAAA	AGGCCTCCCCAGCCATGTGGA	Downstream nested rev

Figure S1

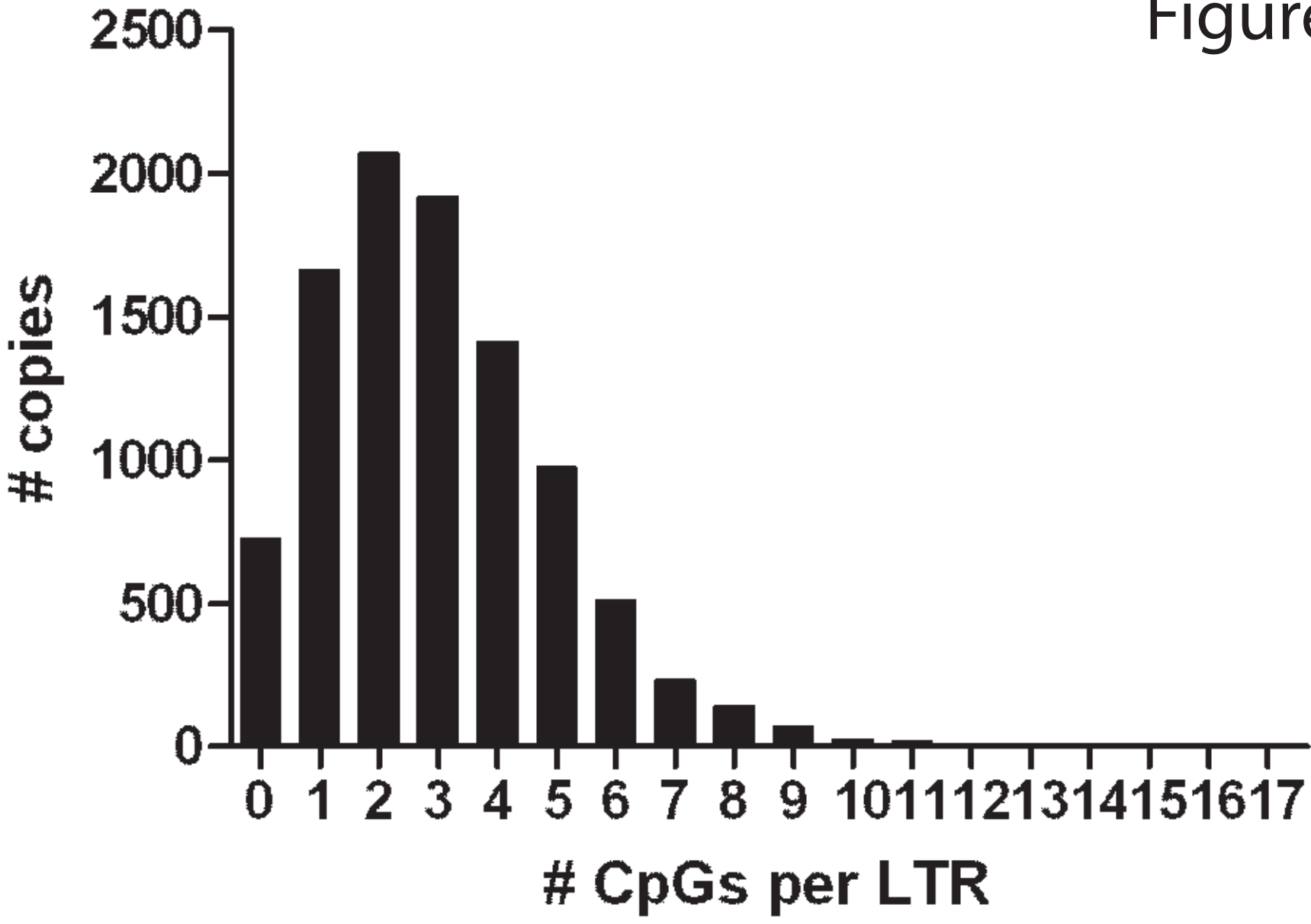

2500
2000
1500
1000
500
0
copies
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
CpGs per LTR

Figure S2

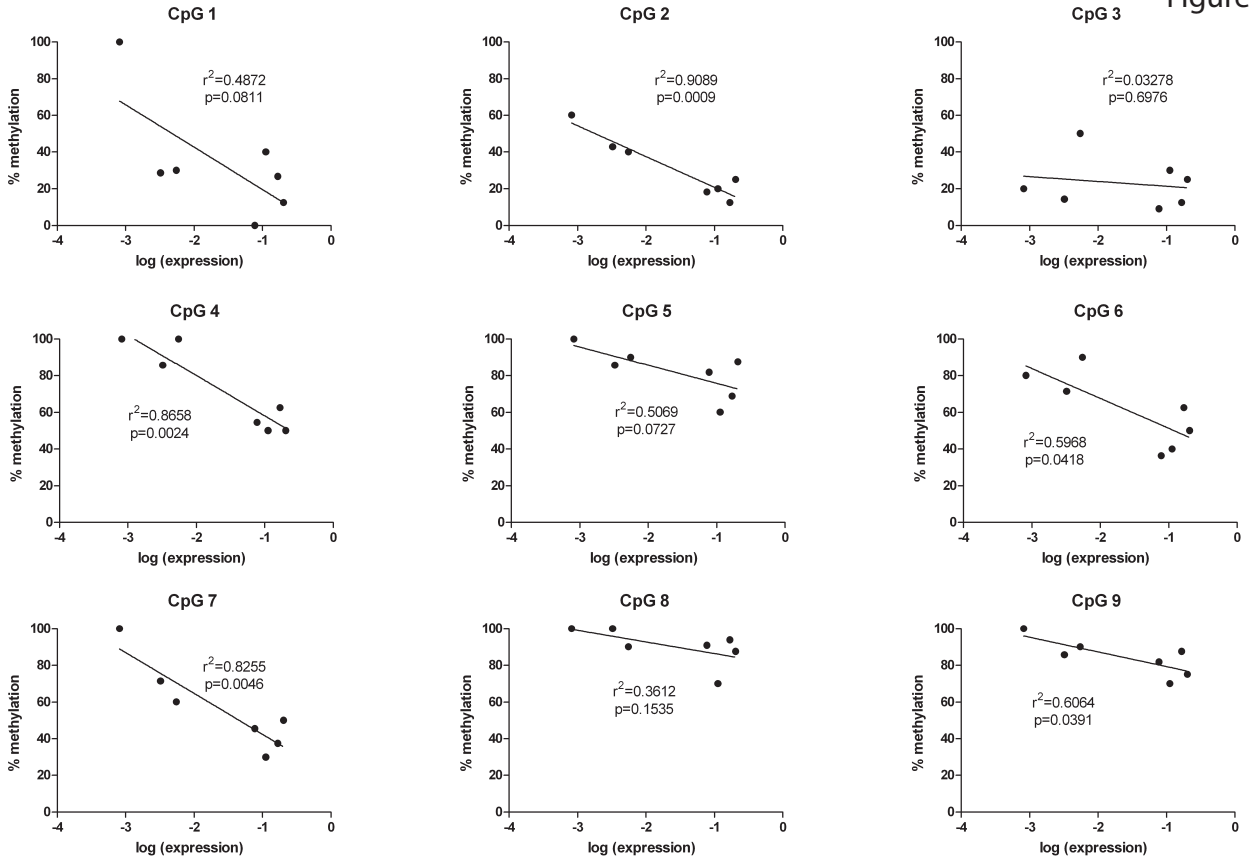
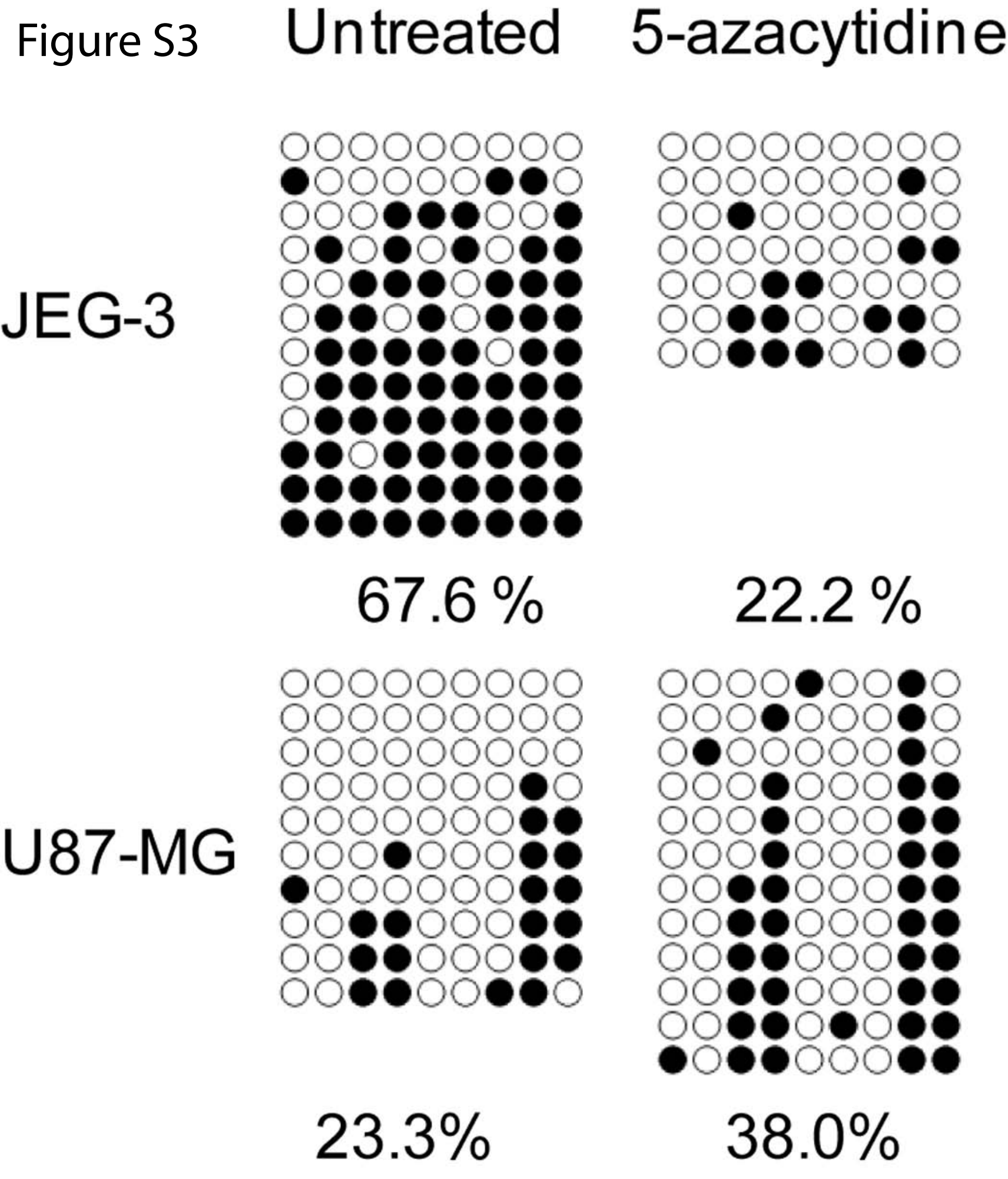

CpG 1
r2=0.4872
p=0.0811
CpG 2
r2=0.9089
p=0.0009
CpG 3
r2=0.03278
p=0.6976
CpG 4
r2=0.8658
p=0.0024
CpG 5
r2=0.5069
p=0.0727
CpG 6
r2=0.5968
p=0.0418
CpG 7
r2=0.8255
p=0.0046
CpG 8
r2=0.3612
p=0.1535
CpG 9
r2=0.6064
p=0.0391
% methylation
log (expression)

Figure S3



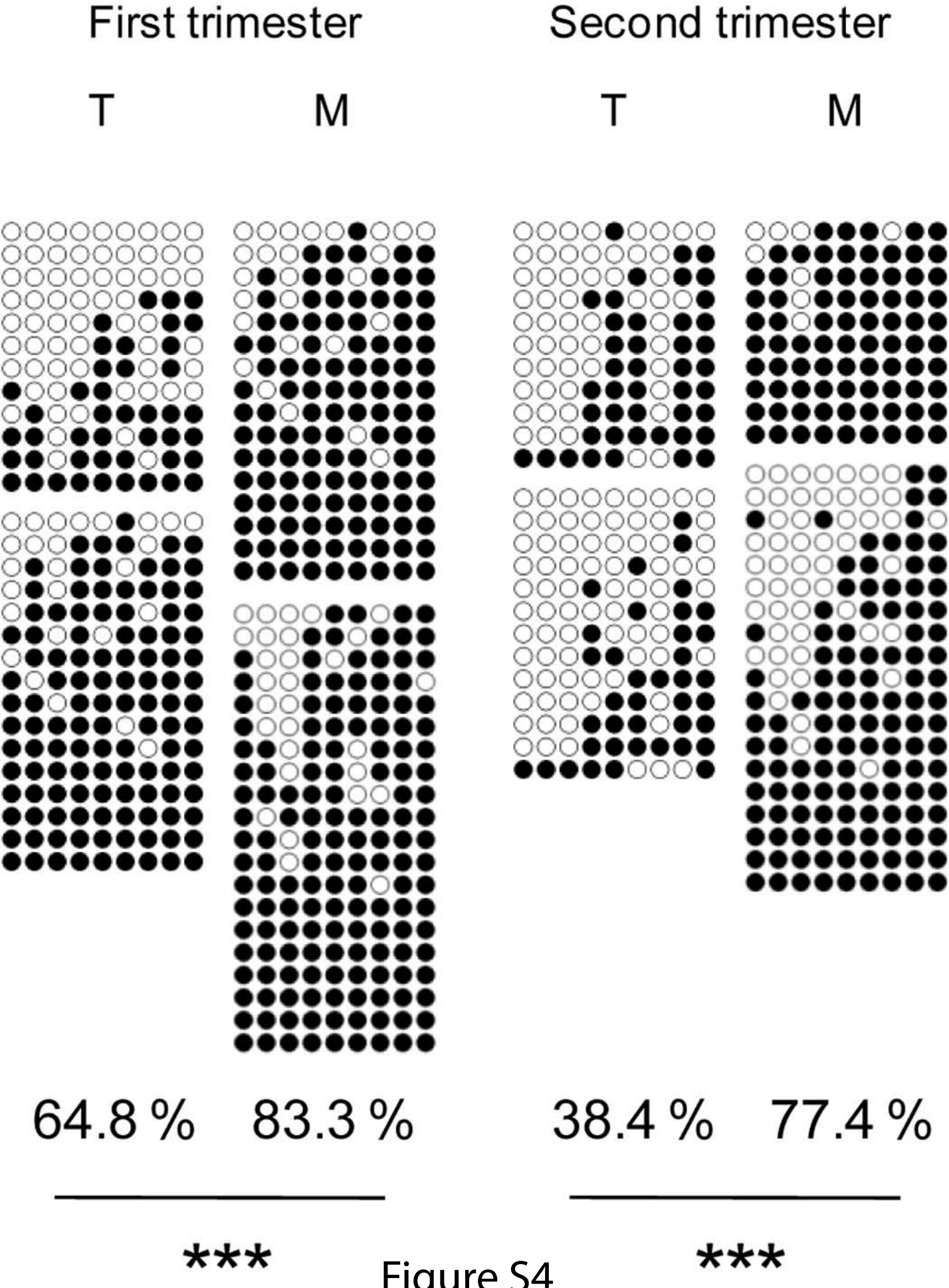
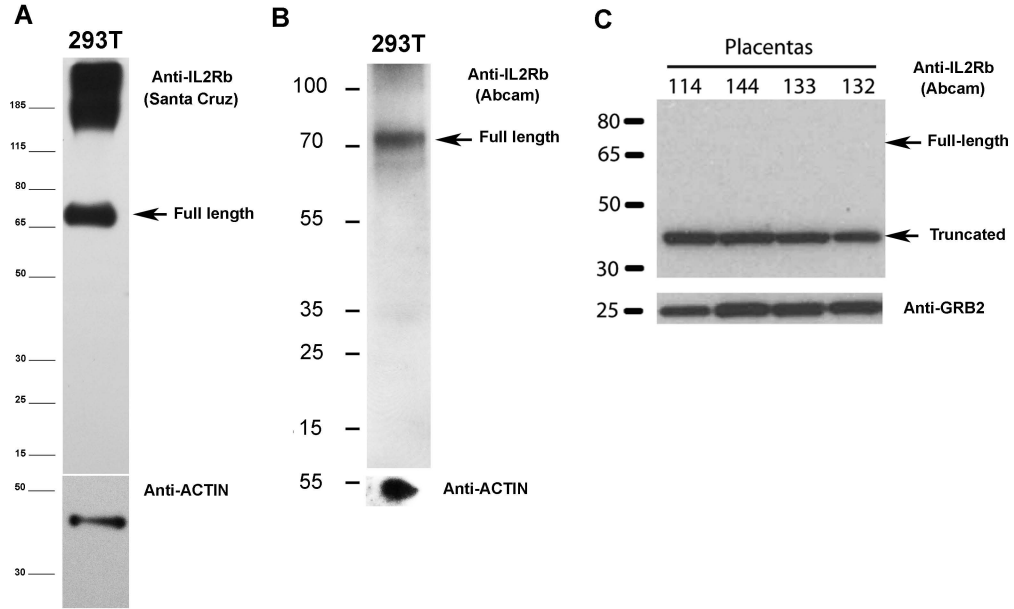


Figure S4

Figure S5


A
293T
Anti-IL2Rb
(Santa Cruz)
185
115
80
65
50
30
25
15
Full length
50
Anti-ACTIN
30
B
293T
100
70
55
35
25
15
55
Anti-IL2Rb
(Abcam)
Full length
Anti-ACTIN
C
Placentas
114
144
133
132
Anti-IL2Rb
(Abcam)
80
65
50
30
25
Full-length
Truncated
Anti-GRB2