

**Supplementary Table 2. Summary of enrichment analysis of genomic features**

Dataset*	Total No. windows	No. feature windows	Empirical frequency	p-value**
<b>CpG islands</b>				
Hg18	60,614,574	486,744	0.008	
Colon cancer data				
P001	26,133	19,119	0.732	<2.23x10 <sup>-308</sup>
P010	470	226	0.481	<2.23x10 <sup>-308</sup>
P011	56,819	40,753	0.717	<2.23x10 <sup>-308</sup>
P110	377	36	0.096	5.09x10 <sup>-81</sup>
P101	103	64	0.621	<2.23x10 <sup>-308</sup>
P100	873	61	0.070	1.85x10 <sup>-93</sup>
<b>CTCF binding sites</b>				
Hg18	60,614,574	2,177,551	0.036	
Colon cancer data				
P001	26,133	7,626	0.292	<2.23x10 <sup>-308</sup>
P010	470	92	0.196	1.15x10 <sup>-77</sup>
P011	56,819	9,264	0.163	<2.23x10 <sup>-308</sup>
P110	377	44	0.117	1.75x10 <sup>-17</sup>
P101	103	7	0.068	4.03x10 <sup>-22</sup>
P100	873	84	0.096	5.20x10 <sup>-22</sup>
<b>Repetitive elements</b>				
Hg18	60,614,574	38,192,602	0.630	
Colon cancer data				
P001	26,133	3,533	0.135	1
P010	470	64	0.136	1
P011	56,819	5,918	0.104	1
P110	377	105	0.279	1
P101	103	27	0.262	1
P100	873	384	0.440	1

\*The colon cancer data is categorized by differential methylation patterns; Hypermethylated in CIMP only (P001), Hypermethylated in non-CIMP only (P010), Hypermethylated in all tumors (P011), Hypomethylated in CIMP only (P110), Hypomethylated in non-CIMP only (P101), and Hypomethylated in all tumors (P100).

\*\*P values were obtained by testing the hypothesis that the frequency of genomic features in the colon cancer dataset was greater than the genome average for the same feature.

**Supplementary Table 6. Clinical details of tumor samples**

Sample	MSI	<i>BRAF</i>	<i>KRAS</i>	CIMP markers	Stage	Site	Differentiation
T1	Stable	WT	MUT	0/5	4	Distal	Poor
T2	Stable	WT	MUT	0/5	3	Distal	Moderate
T3	Stable	WT	MUT	0/5	2	Distal	Moderate
T4	Unstable	MUT	WT	5/5	2	Proximal	Moderate
T5	Unstable	MUT	WT	5/5	2	Proximal	Moderate
T6	Unstable	MUT	WT	5/5	2	Proximal	Moderate

