**Additional file 16:** Number of IHRs containing CpG islands and the percentage of CpG islands' length.

	IHR1		IHR2	
	Observed	Expected	Observed	Expected
Percentage of IHRs contain CpG island (%)	10.6 (p* = 0.001)	0.5	14.4 (p* = $0.001$ )	2.3
Average percentage of CpG islands' length (%)	44.7 (p* = 0.11)	13.6	7.1 (p* = 0.06)	3.5

<sup>\*</sup> Randomly selected human genomic regions were used to test the significance; p value was given in the bracket. Two sample Wilcoxon test was used to test the significance of difference in the percentage of CpG islands length between IHR1s and IHR2s: p = 5.5e-6