



**Supplemental Figure 6.** The figure shows four lines of evidence supporting the usage of distal CGI as alternative promoter by MethExp genes in contrast to MethNotExp genes in mouse embryonic stem cells. Each panel shows the distribution of the median (i) fractional methylation at upstream CGIs (top-left), (ii) genomic distance between distal CGI and gene (top-right), (iii) RNA-seq RPKM signal (bottom-left), and (iv) RNA-seq coverage (bottom-right) at the segment region (Y-axes) corresponding to MethExp (yellow) vs. MethNotExp genes (red) (X-axes).