**S1 Fig. Dnmt1 preferentially methylates hemi-methylated DNA.** (A) Sodium dodecyl sulfate polyacrylamide gelelectrophoresis (SDS-PAGE) showing the purified, recombinant Dnmt1 (lane 2) and histone proteins (lane 4). The proteins were purified as described and analyzed by SDS-PAGE. (B) *In vitro* DNA methyltransferase activity assay using 12.5 – 200 nM Dnmt1, fixed DNA concentrations of 555 nM DNA and 411 nM [3H]-SAM, representing 5 pMol of CpG sites. The specific incorporation of [3H]-methyl groups is shown as kilo counts per minute (kcpm).