



**Supplementary Figure 8:** Atoh1 binds the DNMT proteins and associates to a DNA methyltransferase activity. **A**, GST Pull-down assays using Atoh1 protein fused to GST (GST-Atoh1) and *in vitro* translated Dnmts (IVT-Dnmt1, IVT-Dnmt3a or IVT-Dnmt3b). **B**, A GST-fused Atoh1 protein was used to purify DNA methyltransferase activity from nuclear extracts. After incubation, the beads were washed and assayed for DNA methyltransferase activity read as c.p.m. of S-adenosyl-L[methyl-3H] methionine incorporated into an oligonucleotide substrate. GST-tagged embryonic ectoderm development protein (GST-EED) was used as a positive control. **C**, Co-Immunoprecipitation experiments shows that Atoh1 associated with Dnmt1. 293T cells were transiently transfected in culture dishes (10 cm diameter) with 3  $\mu$ g of HA-Atoh1 plasmid **D**, Mapping of Atoh1 binding to Dnmt1. GST Pull-downs were performed with Dnmt1 fragments fused to GST and *in vitro* translated Atoh1. The upper part is a schematic representation of the Dnmt1 sequences used.