



**Supplementary Figure S8: Characterization of isogenic IHA cell lines.** (A) Immunoblot analysis of HA-tagged IDH1 expression in IHA cells expressing empty vector (Empty), HA-tagged wild-type IDH1 (IDH1<sup>WT</sup>) or HA-tagged R132H-mutant IDH1 (IDH1<sup>R132H</sup>). (B) Intracellular concentrations of 2HG in the IHA cell lines shown in (A), as measured by GC-MS. (C) Immunoblot analysis of trimethyl-H3K4 levels in the IHA cell lines shown in (A-B). (D) Total 5hmC content in the IHA cell lines shown in (A-C), as measured by LC-MS. Experiments were performed with IHA cells that had been passaged ~35 times after lentiviral infection. Shown in (A-D) are representative results from two independent experiments.