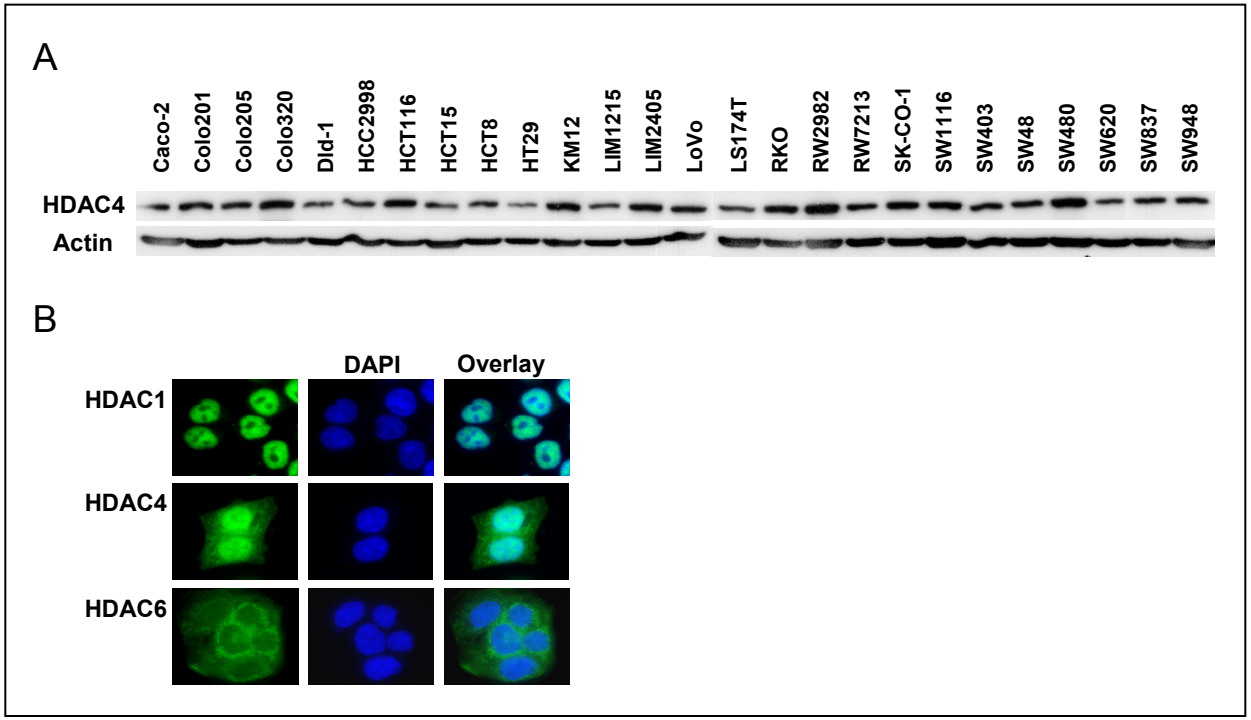
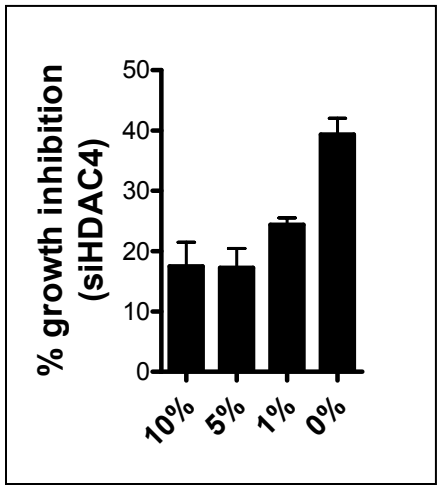
Supplementary Figure 1



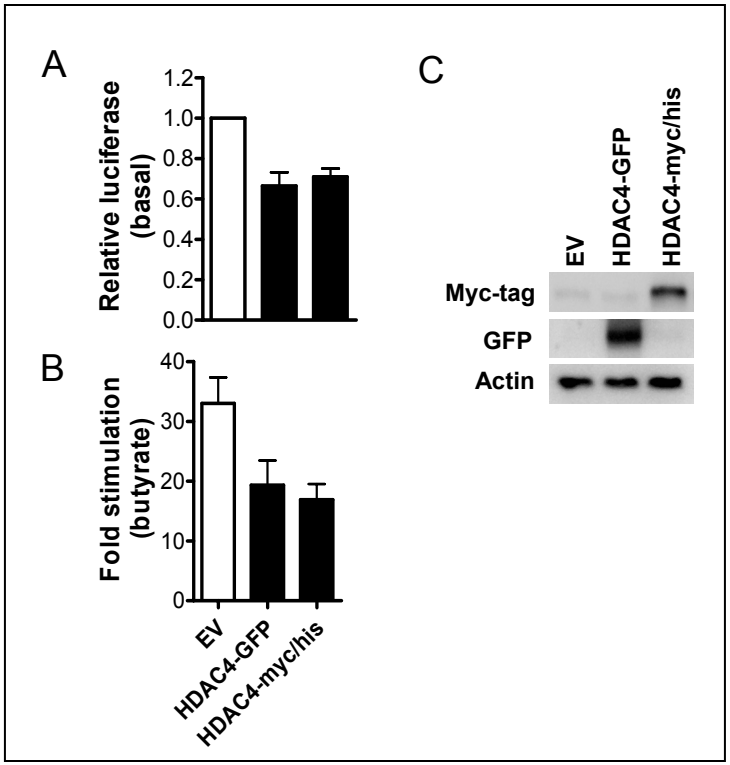
(A) Levels of HDAC4 in protein extracts from a panel of 26 colon cancer cell lines were quantified by Western Blot. Blots were reprobed for actin to ensure equal loading.
(B) Immunofluorescence staining of HDAC1, HDAC4 and HDAC6 (green) in HCT116 human colon cancer cells is shown relative to DAPI-stained nuclei (blue).

Supplementary Figure 2



Effect of decreasing amounts of serum on the ability of siHDAC4 treatment to reduce adherent cell number compared to NT treated controls after 72h, in HCT116 cells. The values are mean + SEM of 2 representative experiments, and expressed as a percentage growth inhibition compared to NT controls.

Supplementary Figure 3



Effect of HDAC4 overexpression on **(A)** basal or **(B)** 2 mM butyrate-induced p21 promoter activity after 24h. HCT116 cells were co-transfected with pWP-133 (0.25 μg), TK-Renilla (0.1 μg) and HDAC4-GFP (1-1084), HDAC4-myc/his or their relevant empty vector controls (all 1 μg). The values are mean + SEM and are expressed as a percentage of pWP-133 activity normalized to relevant empty vector controls (empty bars) for basal p21 activity, and as fold stimulation of p21 promoter activity for butyrate-induction.
(C) Protein levels of the myc and GFP tags were measured by Western Blot following transfection of HCT116 cells with HDAC4-GFP or HDAC4-myc/his (1 μg). Blots were reprobed for actin to ensure equal loading.