

Supplementary Figure 14. SIRT7 can deacetylate CDK9 but has no effect on the global level of Ser2P of Pol II CTD. (a) WB analysis showing that ectopic expression of Flag-SIRT7 in HEK293T cells did not affect global level of Ser2P of Pol II CTD. HEK293T cells were transfected with a FLag-SIRT7 expression plasmid at high transfection efficiency and two days after transfection the cell extracts were prepared and utilized for WB analysis as indicated and for IP-WB analysis in (b). (b) IP-WB analysis showing that ectopic expression of Flag-SIRT7 indeed led to CDK9 deacetylation. Cellular extracts derived from control and Flag-SIRT7 expressing HEK293T cells were subjected to IP with anti-CDK9 antibody and WB analysis with anti-CDK9 as well as anti-pan-acetylated lysine antibody as indicated. (c) Knockdown of SIRT7 did not affect Ser2P of Pol II CTD in HEK293T cells. Knockdown was achieved by transfection of siRNA specific for SIRT7 and knockdown of SIRT7 was confirmed by WB analysis. (d) IF staining analysis showing that ectopic expression of Flag-SIRT7 did not affect the global level of Ser2P of Pol II CTD in HeLa cells. HeLa cells were transfected with Flag-SIRT7 plasmids and IF staining was performed two days after transfection.