



Supplementary Figure. S6. ^{WT}MEK and ^{P124S}MEK activated by ^{V600E}B-RAF display similar *in vitro* kinase activities toward recombinant ERK1. HEK293T cells were transfected with vector, FLAG-MEK1 WT, or FLAG-MEK1 P124S in the absence or presence of co-transfected ^{V600E}B-RAF. Cells were lysed and exogenous MEK1 immunoprecipitated (IP) using isotype (I) control or anti-FLAG (F) antibody (ab), washed, and subjected to *in vitro* kinase assay. Pre-IP lysates were immunoblotted for FLAG levels. After the kinase reaction, the supernatant (sup) or ab-bead fractions were mixed with denaturing loading buffers, fractionated and immunoblotted against indicated phospho- or total protein levels (rERK, recombinant ERK).