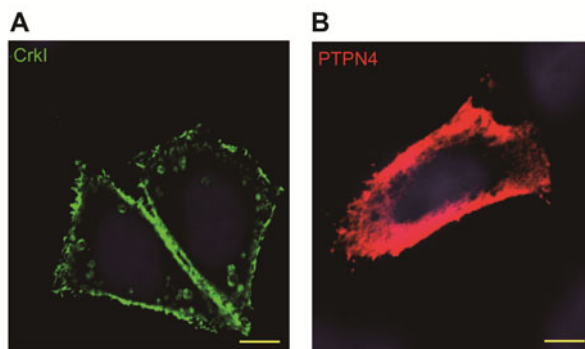


Supplementary material

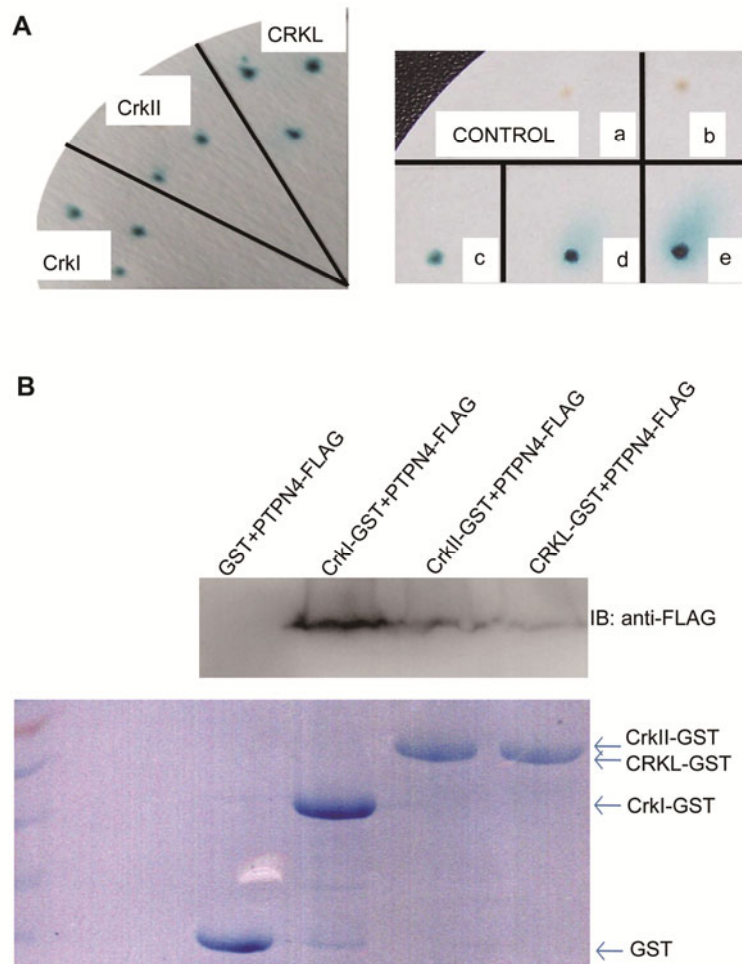
**PTPN4 NEGATIVELY REGULATES CRKI IN HUMAN CELL LINES**

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Suppl. Fig. 1. Localization of Crkl or PTPN4 in cells. A – Localization of Crkl in cells. Crkl-GFP plasmid was transfected in HeLa cells. B – Localization of PTPN4 in cells. PTPN4-Myc plasmid was transfected in HeLa cells. Immunofluorescence staining was performed using an anti-c-Myc antibody. These images were visualized using a confocal laser-scanning microscope. Bars = 5 µm.



Suppl. Fig. 2. PTPN4 can interact with all three CRK family members. A – Yeast two-hybrid assay. Left panel: pDBLeu-PTPN4 was co-transformed with pPC86-CrkI, pPC86-CrkII, and pPC86-CRKL into yeast strain MaV203. The  $\beta$ -galactosidase assay showed that PTPN4 can interact with all three CRK family members. Blue color indicates positive interactions. Right panel: MaV203 yeast two-hybrid controls with different degrees of protein-protein interaction. In the controls from a to e, the interaction degree is from negative to maximal positive. B – GST pull-down assay. Recombinant GST, GST-CrkI, GST-CrkII and GST-CRKL proteins were purified from *E. coli*. PTPN4 protein was expressed and purified from HEK293T cells.