

SUPPLEMENTARY ONLINE DATA

TGF-β sensitivity is determined by N-linked glycosylation of the type II TGF-β receptor

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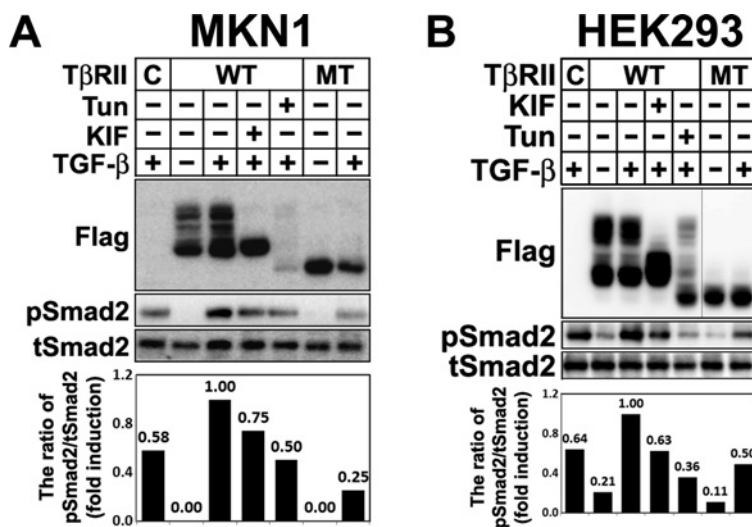


Figure S1 N-linked glycosylation levels of TβRII regulate TGF-β signaling in MKN1 and HEK-293 cell lines

C-terminally FLAG-tagged mTβRII-B was transfected into MKN1 (A) and HEK-293 (B) cells. Cells were treated with KIF and Tun at 10 μg/ml for 24 h and 1 μg/ml for 12 h respectively. At 28 h after transfection, cells were treated with or without TGF-β1 at 5 ng/ml for 30 min. Cell extracts were immunoblotted with anti-FLAG (TβRII), anti-phospho-Smad2 or anti-Smad2 antibody. Band intensities representing phospho-Smad2 and Smad2 expression levels were converted by densitometry using ImageJ software into the ratio of phospho-Smad2 to Smad2. Note that KIF and Tun treatment reduced or inhibited the N-linked glycosylation level of TβRII. In addition, Smad2 phosphorylation was subsequently reduced upon KIF and Tun treatment.

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