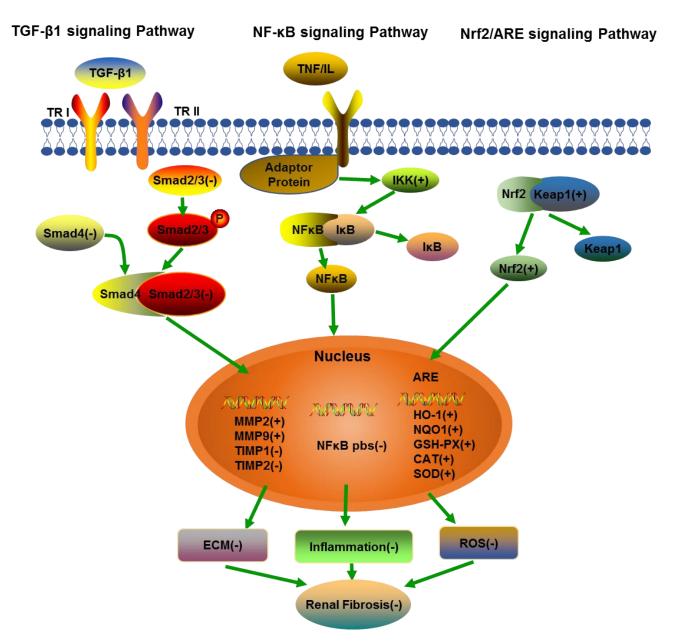
## Supplementary figure



Schematic illustration for summary of the regulatory effects of SPJs on TGF- $\beta$ 1/Smad signaling, NF $\kappa$ B signaling and Nrf2-ARE signaling pathway. (+): positive effect, (-): negative effect.