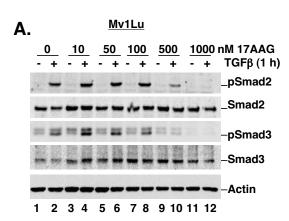
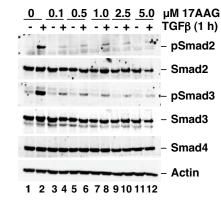
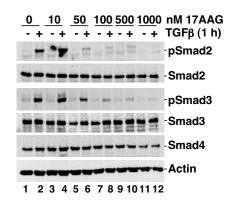
## **Supporting Information**

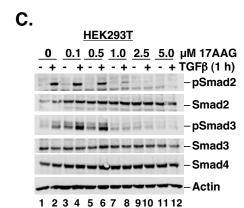
Wrighton et al. 10.1073/pnas.0800163105



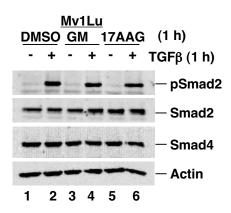








**Fig. 51.** 17AAG inhibits TGF $\beta$ -induced Smad2/3-phosphorylation in a concentration-dependent manner. Mv1Lu cells (*A*), HaCaT cells (*B*), or HEK293T cells (*C*) were treated with the indicated concentration of 17AAG for 6 h, with TGF $\beta$  added for the last 1 h. Cells were harvested for Western blotting with anti-Smad, anti-phospho-Smad, and anti-actin antibodies.



**Fig. 52.** 17AAG inhibits TGF $\beta$ -induced Smad2/3-phosphorylation in a time-dependent manner. Mv1Lu cells were treated with 17AAG or GM for 1 h in the absence or presence of TGF $\beta$ . Cells were harvested for Western blotting with anti-Smad, anti-phospho-Smad, and anti-actin antibodies.

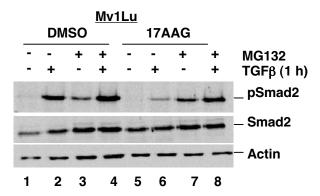
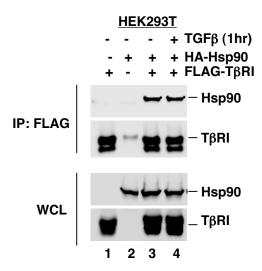
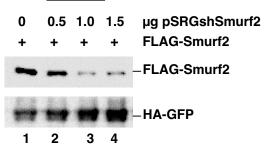


Fig. 53. 17AAG-induced loss of Smad-phosphorylation in Mv1Lu cells can be rescued by MG132. Mv1Lu cells were treated with 1  $\mu$ M 17AAG for 6 h, with TGF $\beta$  added for the last 1 h. Cells were cotreated with MG132 in parallel with 17AAG as indicated. Cells were harvested for Western blotting with anti-Smad2, anti-phospho-Smad2, and anti-actin antibodies.

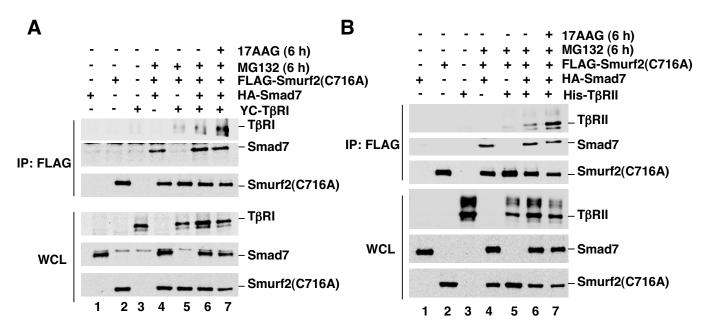


**Fig. S4.** TGF $\beta$  does not regulate T $\beta$ RI-Hsp90 interactions *in vivo*. HEK293T cells were cotransfected with HA-Hsp90 and FLAG-T $\beta$ RI, and cultured in the presence or absence of TGF $\beta$  for 1 h before harvest. FLAG-T $\beta$ R-bound Hsp90 was identified by anti-FLAG immunoprecipitation (IP) and anti-HA Western blotting. WCL, whole-cell lysate.

## **HEK293T**



**Fig. 55.** pSRGshSmurf2 efficiently knocks down FLAG-Smurf2. HEK293T cells were cotransfected with FLAG-Smurf2, HA-GFP, and increasing concentrations of pSRGshSmurf2 as indicated. Cells were harvested for Western blotting with anti-FLAG and anti-HA antibodies.



**Fig. 56.** Hsp90 inhibition by 17AAG promotes T $\beta$ R-Smurf2 binding. (*A* and *B*) HEK293T cells were cotransfected with HA-Smad7, FLAG-Smurf2(C716A), and YC-T $\beta$ RI (*A*) or His-T $\beta$ RII (*B*). Cells were treated with 2  $\mu$ M 17AAG and/or MG132 for 6 h as specified. FLAG-Smurf2(C716A)-bound T $\beta$ R was identified by anti-FLAG IP and anti-GFP (*A*) or anti-His (*B*) Western blotting.

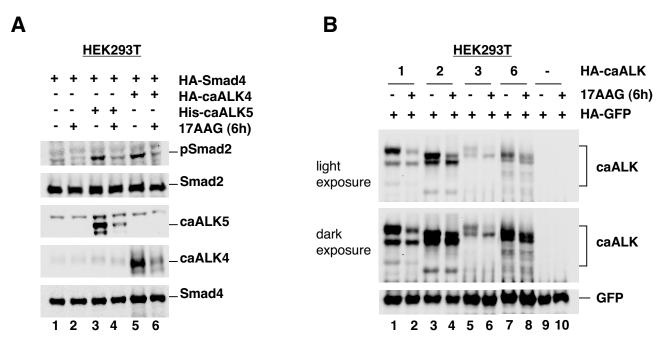


Fig. 57. Hsp90 inhibition by 17AAG decreases the protein level of all six type I TGF $\beta$  superfamily receptors assessed. (A) 17AAG blocks endogenous Smad2 activation by constitutively active (ca) T $\beta$ RI and ActRIB. HEK293T cells were transfected with HA-Smad4 and His-caALK5 (constitutively active mutant of T $\beta$ RI) or His-caALK4 (constitutively active mutant of ActRIB). Cells were treated for 6 h with 2  $\mu$ M 17AAG or DMSO, before harvest for Western blotting with anti-Smad2, anti-phospho-Smad2, anti-HA, and anti-His antibodies. (B) 17AAG reduces the protein level of caALK1 (ACTVRL1), caALK2 (ActRIA/ACVR1), caALK3 (BMPR1A), and caALK6 (BMPR1B). HEK293T cells were transfected with HA-GFP and HA-caALK1, -2, -3, or -6. Cells were treated for 6 h with 2  $\mu$ M 17AAG or DMSO before harvest for Western blotting with anti-HA antibody.