

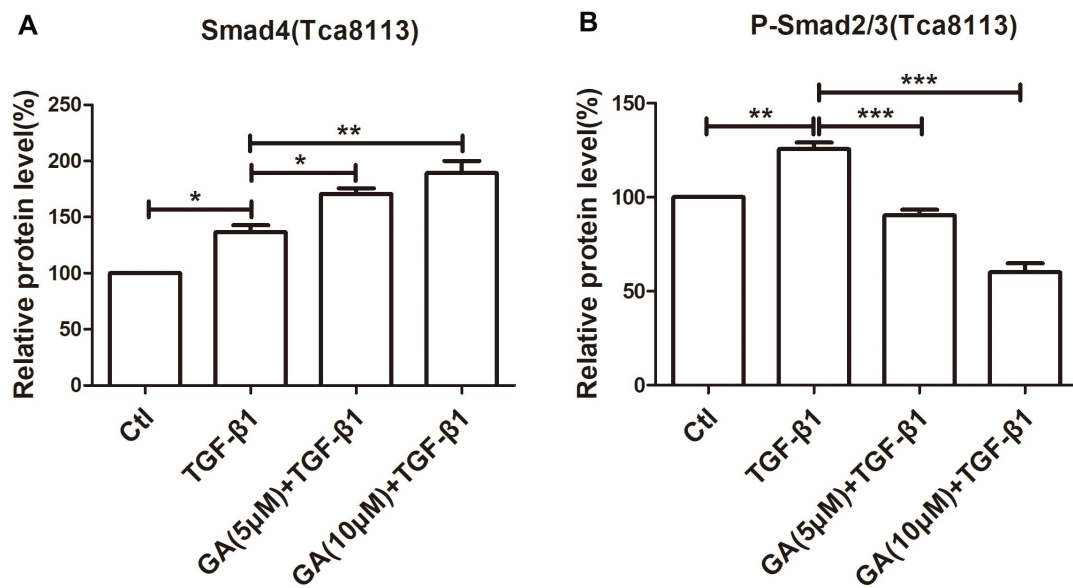
**OMTO, Volume 16**

**Supplemental Information**

**Ginkgolic Acid, a SUMO-1 Inhibitor, Inhibits  
the Progression of Oral Squamous Cell  
Carcinoma by Alleviating SUMOylation of SMAD4**

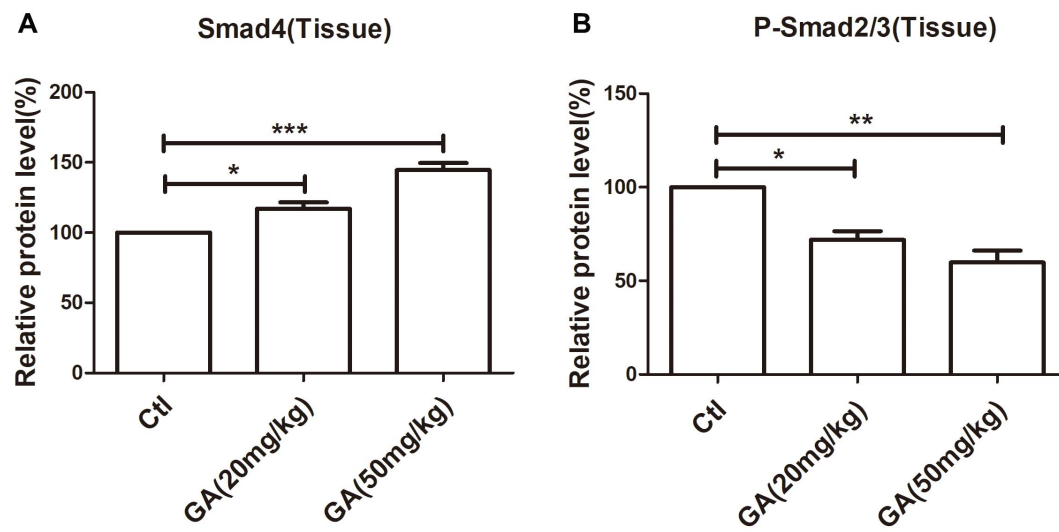
**Ke Liu, Xinhuan Wang, Duo Li, Dongyang Xu, Dezhi Li, Zhiyong Lv, Dan Zhao, Wen-Feng  
Chu, and Xiao-Feng Wang**

Figure S1



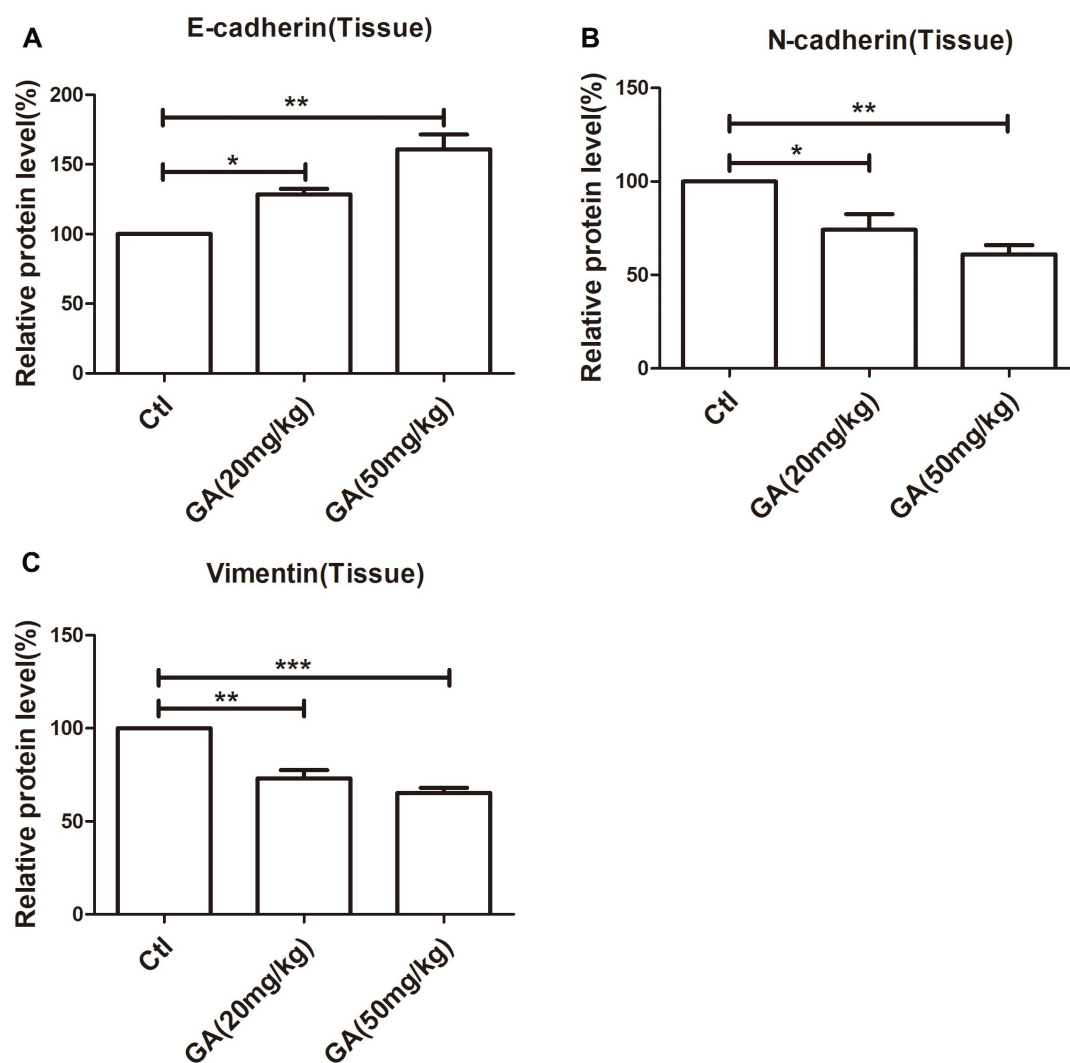
**Figure S1. GA Mediates TGF-β1-induced SMAD4 SUMOylation in OSCC Cells. (A&B)** TGF-β1 increased SMAD4 and P-SMAD2/3 protein levels compared with control. GA (5μM, 10μM) increased SMAD4 protein levels and decreased P-SMAD2/3 protein levels compared with TGF-β1. Data are presented as mean ± SEM of 3 independent experiments. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

Figure S2



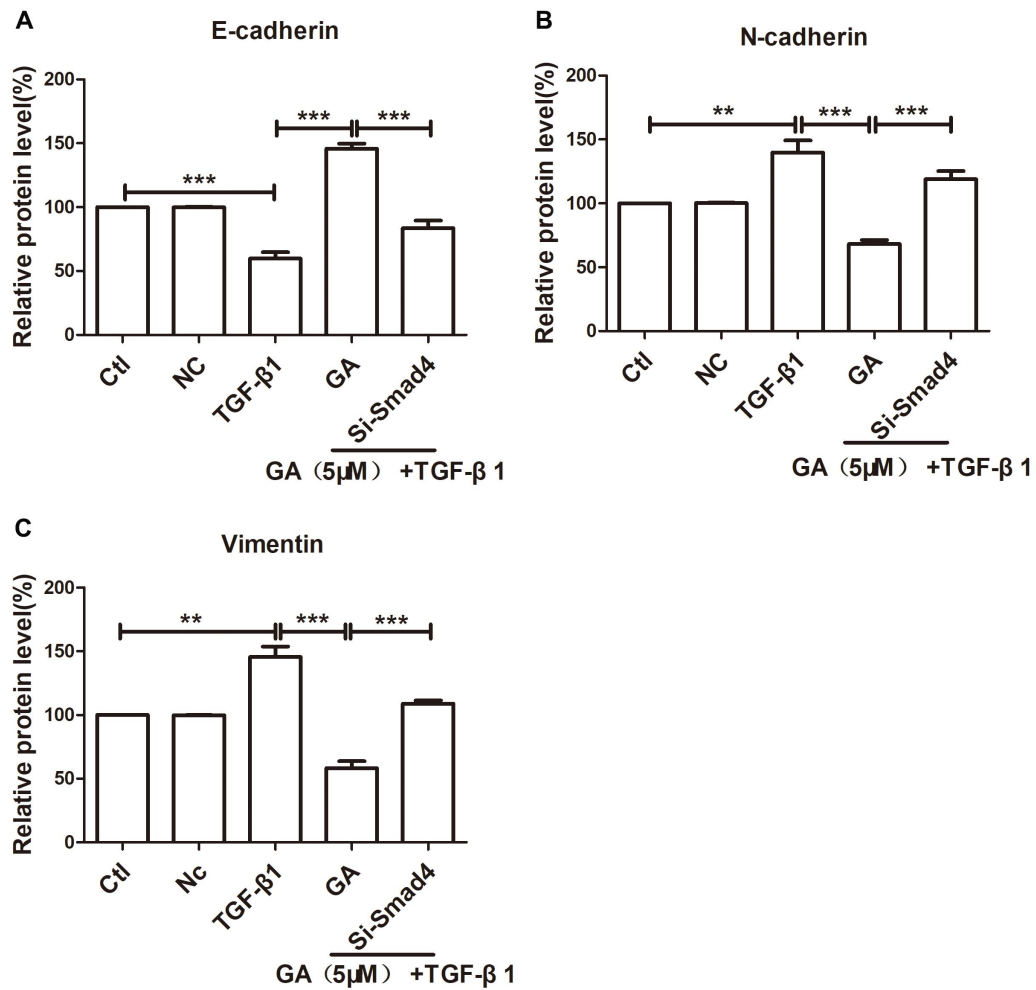
**Figure S2. GA Suppresses Tumor Growth of Tca8113 Cells In a Xenograft Model. (A&B)** GA (20 mg kg<sup>-1</sup>, 5 mg kg<sup>-1</sup>) increased SMAD4 protein levels and decreased P-SMAD2/3 protein levels compared with the control. Data are presented as mean ± SEM of 3 independent experiments. \**P*<0.05; \*\**P*<0.01; \*\*\**P*<0.001.

Figure S3



**Figure S3. GA Suppresses Tumor Growth of Tca8113 Cells In a Xenograft Model. (A&B&C)** GA (20 mg kg<sup>-1</sup>, 50 mg kg<sup>-1</sup>) increased E-cadherin protein levels and decreased N-cadherin and Vimentin protein levels compared with the control. Data are presented as mean ± SEM of 3 independent experiments. \**P*<0.05; \*\**P*<0.01; \*\*\**P*<0.001.

Figure S4



**Figure S4. GA Moderately Affects the Proliferation and Migration of Tca8113 Cell Line induced by the Knockdown of SMAD4.** (A&B&C) The protein levels of EMT markers by knockdown of SMAD4 were compared and quantified in OSCC cells incubated with GA (5 μM) by Western blot analysis. TGF-β1 increased N-cadherin and Vimentin protein levels and decreased E-cadherin protein levels compared with the control. Si-SMAD4 attenuates GA-induced E-cadherin up-regulation and Vimentin down-regulation in Tca8113 cells. Data are presented as mean ± SEM of 3 independent experiments. \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .