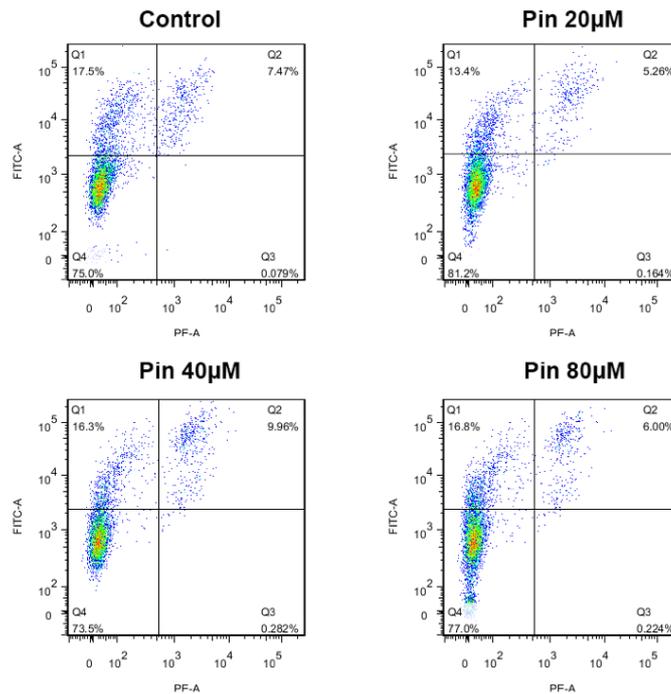
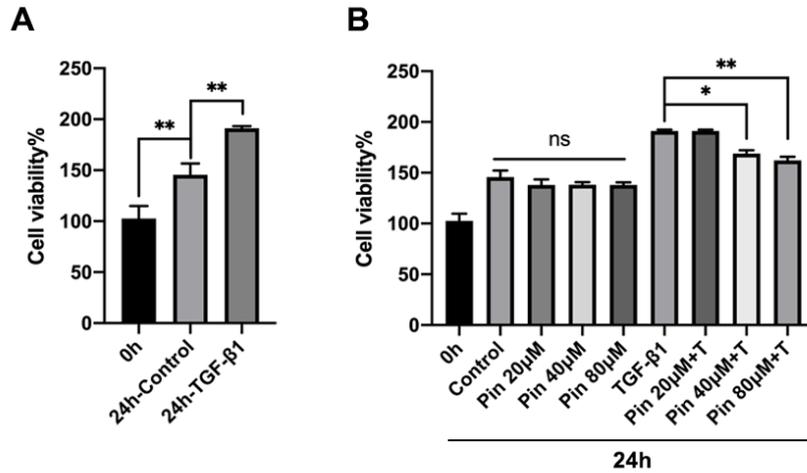


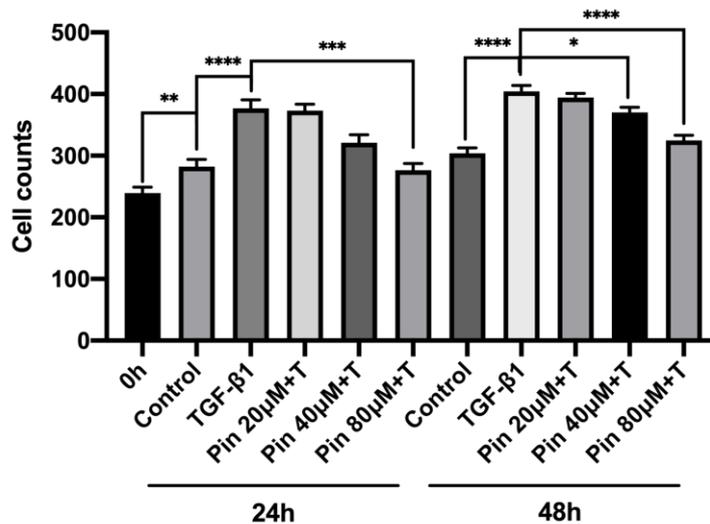
**Figure S1. MTT assays of mouse primary dermal fibroblasts treated with pinocembrin.** Cells were exposed to the indicated doses of pinocembrin (0 to 640 µM) for 24 h, IC50 = 336.9-380.3 µM, (n = 3 per group).



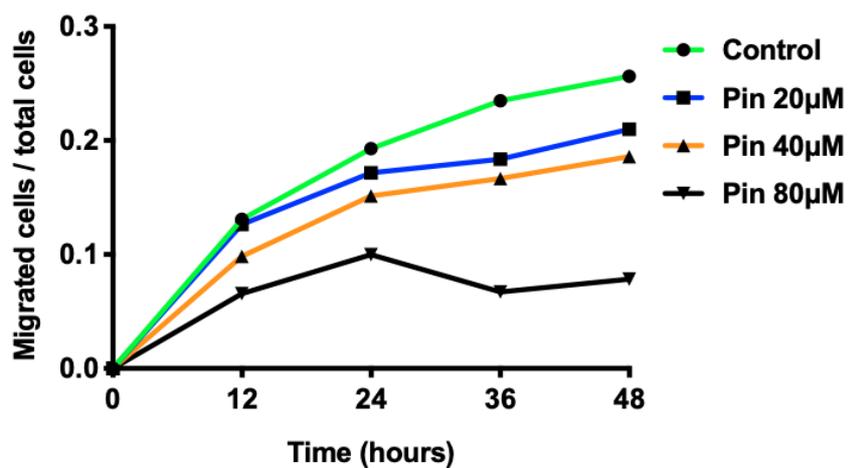
**Figure S2. Flow cytometry assay of mouse primary dermal fibroblasts treated with pinocembrin.** The mouse primary dermal fibroblasts were treated with indicated doses of pinocembrin (20 µM, 40 µM, 80 µM) for 48h and Annexin V/PI staining was subsequently performed to estimate apoptosis and necrosis by flow cytometry.



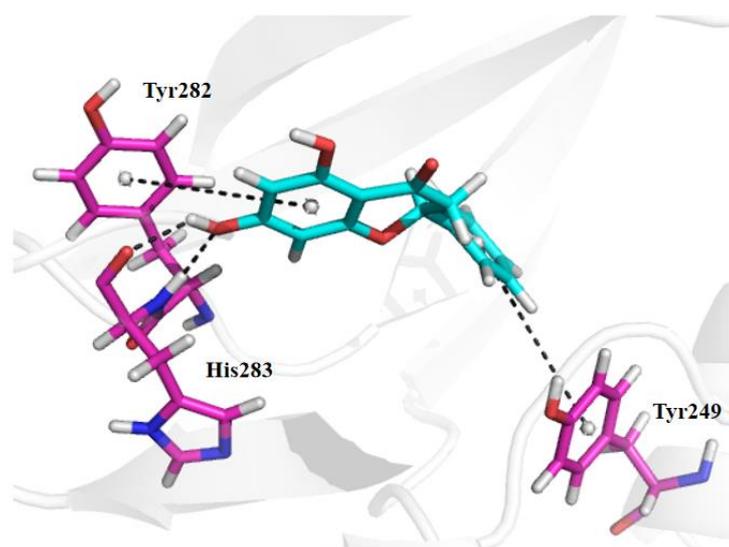
**Figure S3. Pinocembrin inhibits TGF-β1-induced vitality increase of mouse primary dermal fibroblasts.** (A) Cells were treated with or without TGF-β1 (5 ng/ml) for 24 h and the cell viability was detected by MTT assay. (B) Cells were exposed to the indicated doses of pinocembrin (20 μM, 40 μM, 80 μM) and co-treated with or without TGF-β1 (5 ng/ml) for 24 h and the cell viability was detected by MTT assay. (n = 3 per group).



**Figure S4. Pinocembrin inhibits TGF-induced proliferation of mouse primary dermal fibroblasts.** Cells were treated with indicated doses of pinocembrin (20 μM, 40 μM, 80 μM) and co-treated with or without TGF-β1 (5 ng/ml) for 24 h or 48 h and the cell counts were obtained based on the microscope picture. (n = 3 per group).



**Figure S5. Pinocembrin suppresses the migration of keloid fibroblasts.** The wound healing assay was used to analysis the migration of KFs treated with pinocembrin (0, 20, 40, 80  $\mu$ M). The ratio of migrated cells to total cells were calculated in 12, 24, 36, and 48 h post scratching.



**Figure S6. Molecular docking assay of Pinocembrin and ALK5.** The 5'-hydroxyl group of Pinocembrin forms two hydrogen bonds with the backbone of His283 and the two aromatic rings of Pinocembrin interact with Tyr249 and Tyr282 through  $\pi$ - $\pi$  stacking.