

Supplement Figure 1. The effect of PI3K/AKT/mTOR pathway on TSCC was identified. Cal27 and SCC4 cells were treated with 10  $\mu$ M of LY294002, an inhibitior of PI3K/AKT/mTOR pathway, for 48 h. (A) and (B) Western blot of PI3K, mTOR, AKT, p-PI3K, p-mTOR and p-AKT expression levels in NHCK, Cal27, SCC4, LY294002 treated— Cal27 and SCC4 cells. CCK-8 assay for the proliferation (C), colony formation assay for cell colony formation (D), transwell assay for the migration (E) and invasion (F), western blot for MMP-9 and MMP-2 levels (G) and (H), flow cytometric analysis of cell apoptosis (I), caspase-3 activity assay of caspase-3 activity (J), western blot of Bcl-2, Cleaved caspase-3 and Bax levels (K) and (L) in LY294002— or DMSO— treated Cal27 and SCC4 cells. \*P < 0.05 or \*\*P < 0.01 or \*\*\*P < 0.001.