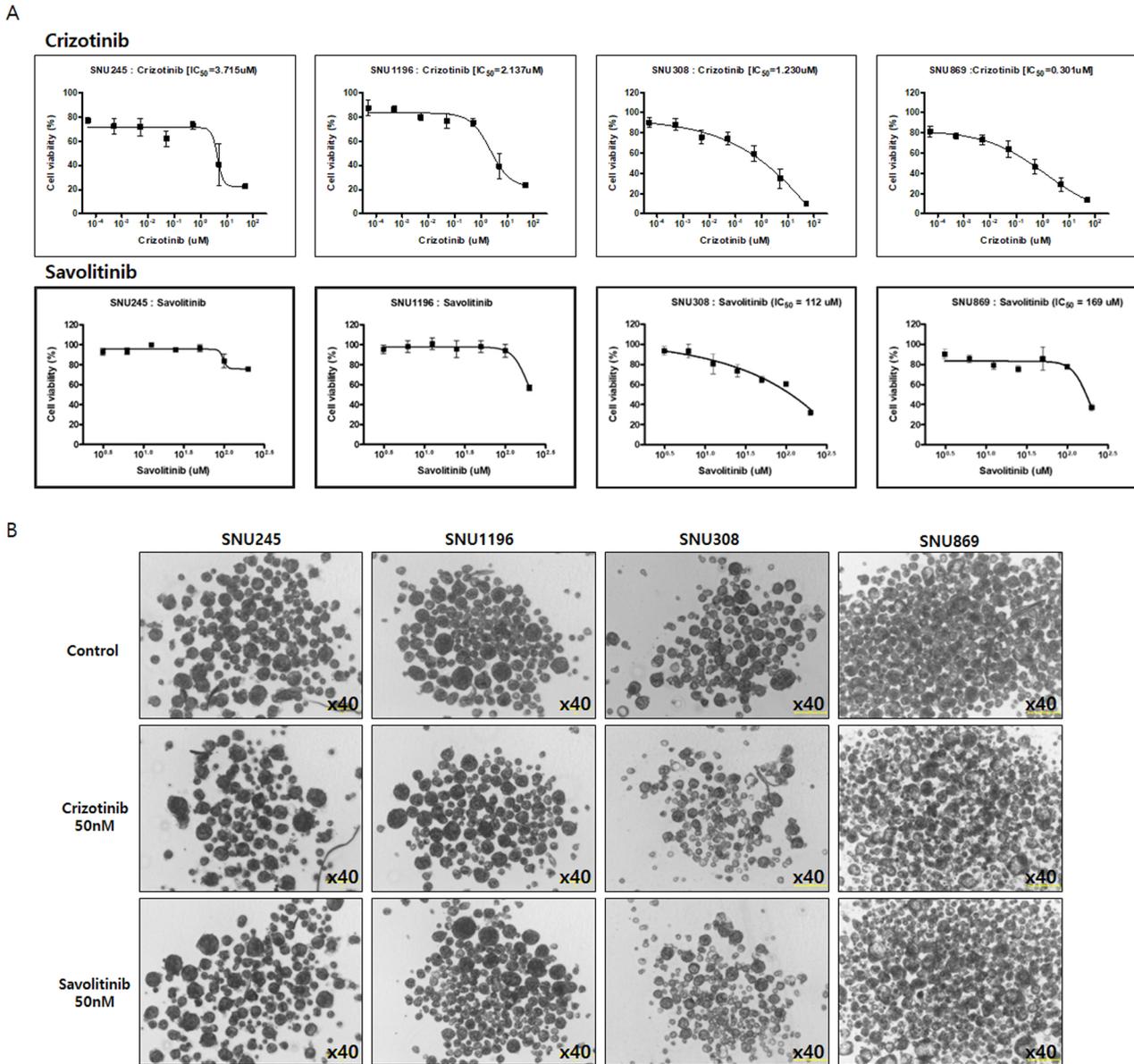
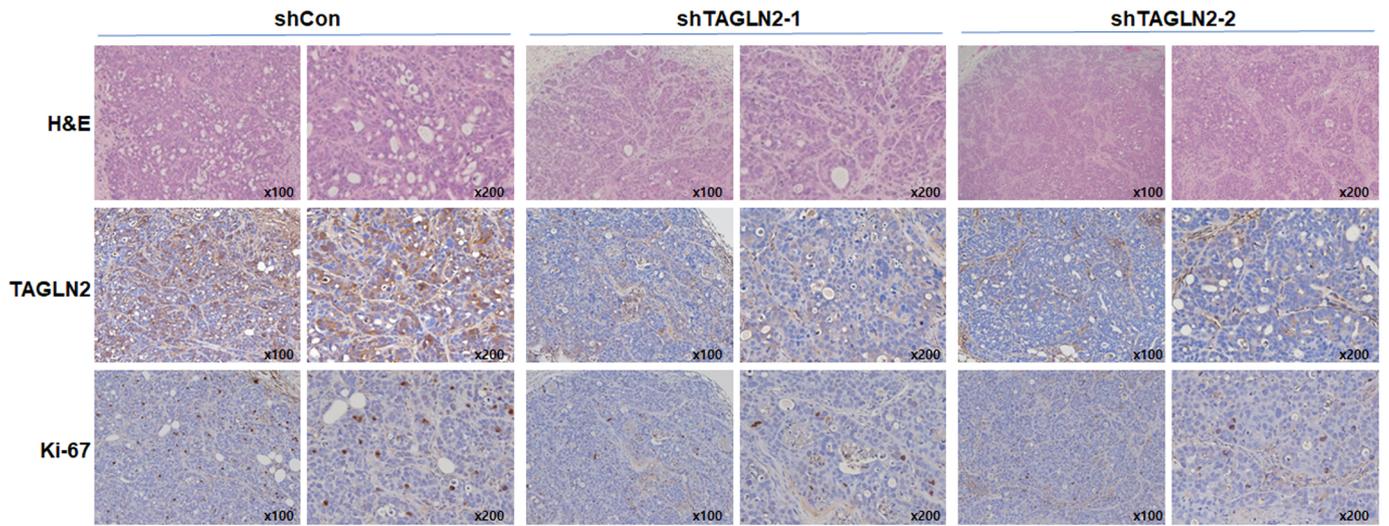


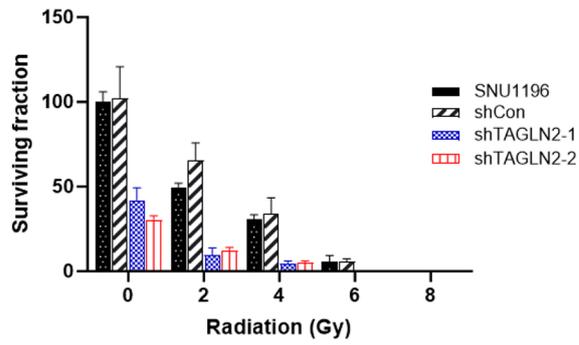
**Supplementary Fig. 1.** Expression of *Transgelin-2* (TAGLN2) in the biliary tract cancer cell (BTC)-spheres. (A) Sphere-formation assays of BTC cell lines, including SNU245, SNU308, SNU478, SNU869, SNU1079, and SNU1196; (100×, 200×). (B) Differentially expressed genes and (C) proteins analyzed in sphere-cultured cells in SNU308 and SNU869. (D) Tumorigenesis was performed using adherent and sphere-cultured SNU1196 *in vivo* (40×, 100×, 200×)



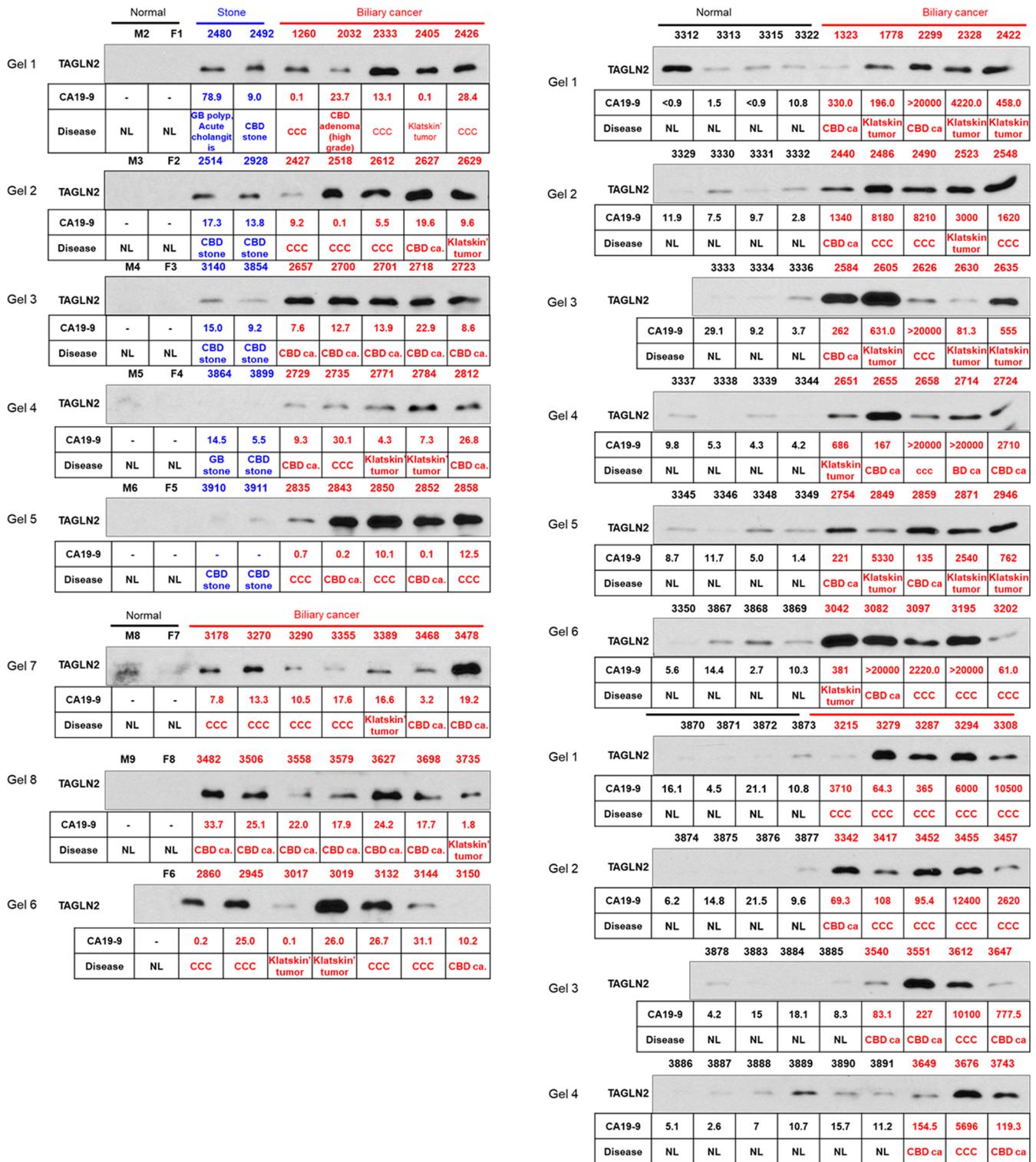
**Supplementary Fig. 2.** Sensitivity to cMET inhibitors. (A, B) Sensitivity of (A) cell lines and (B) spheres to crizotinib and savolitinib (at 50 nM each).



**Supplementary Fig. 3.** The expression of Ki67, a cell proliferation marker in *TAGLN2*-suppressed mice tumor tissues (100 $\times$ , 200 $\times$ ).

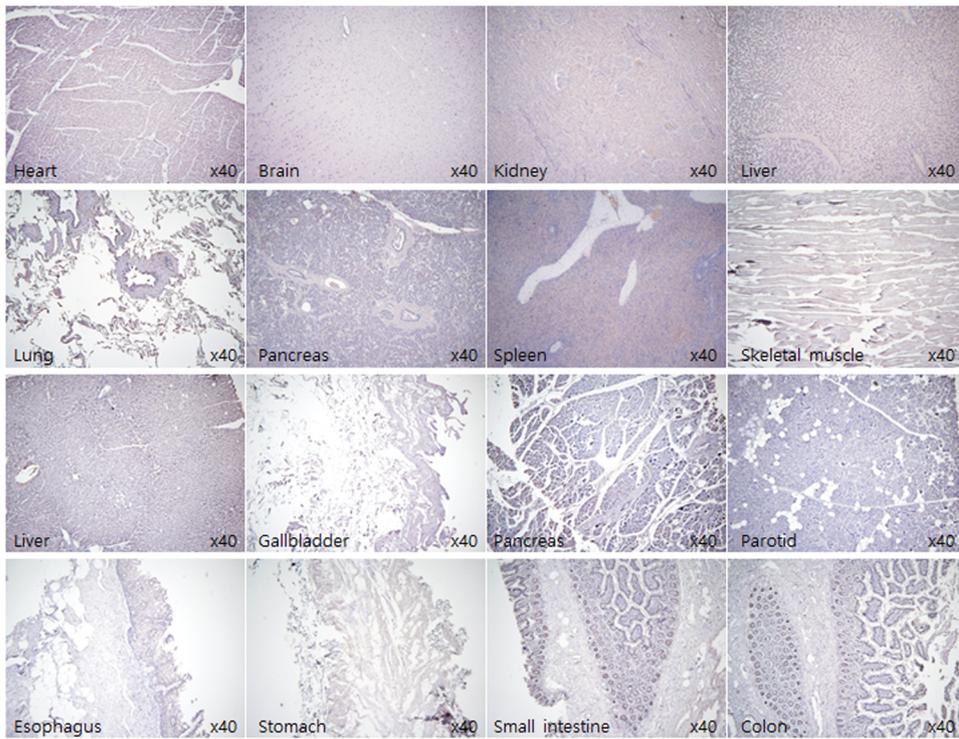


**Supplementary Fig. 4.** The surviving fractions at different doses in cells in which *TAGLN2* is suppressed using shRNA (shTAGLN2-1, -2) compared to control vector-transfected cells.

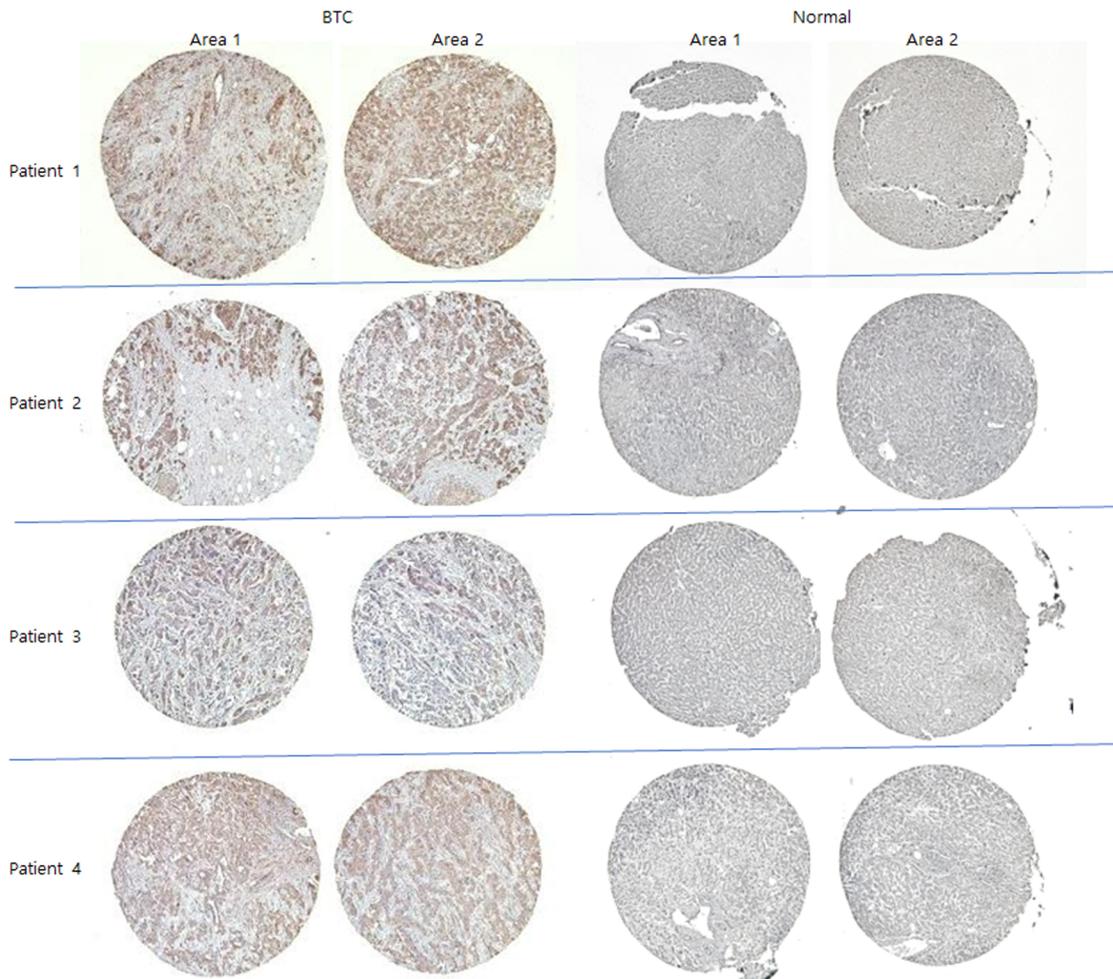


Supplementary Fig. 5. TAGLN2 expression in patient serum samples.

A

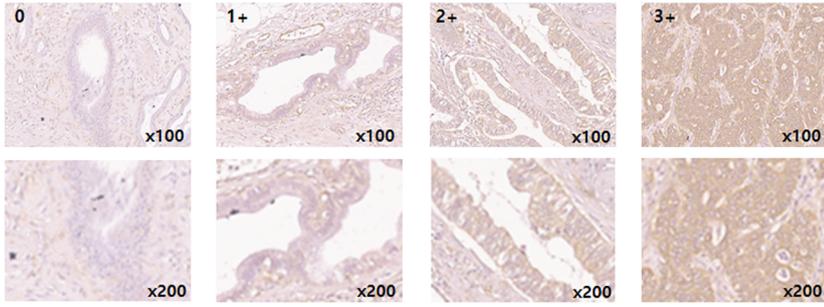


B

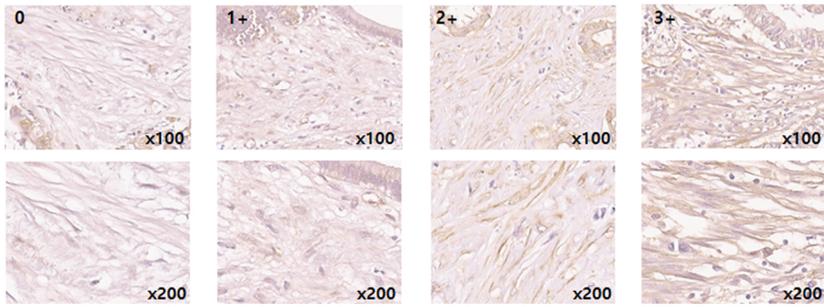


**Supplementary Fig. 6.** TAGLN2 expression in normal and patient tissues. (A) TAGLN2 expression in normal human tissues assessed using IHC (40 $\times$ ). (B) Representative images show the expression of TAGLN2 in cancer and adjacent normal BTC surgical tissues. IHC, Immunohistochemistry.

**Cancer**

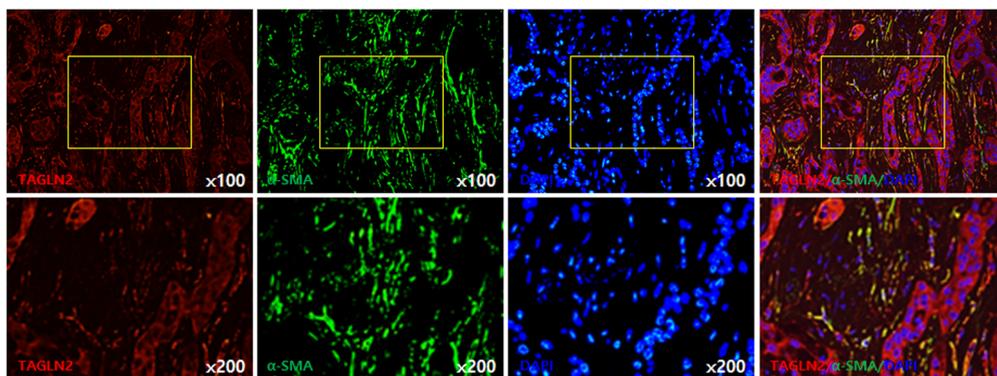


**Stroma**

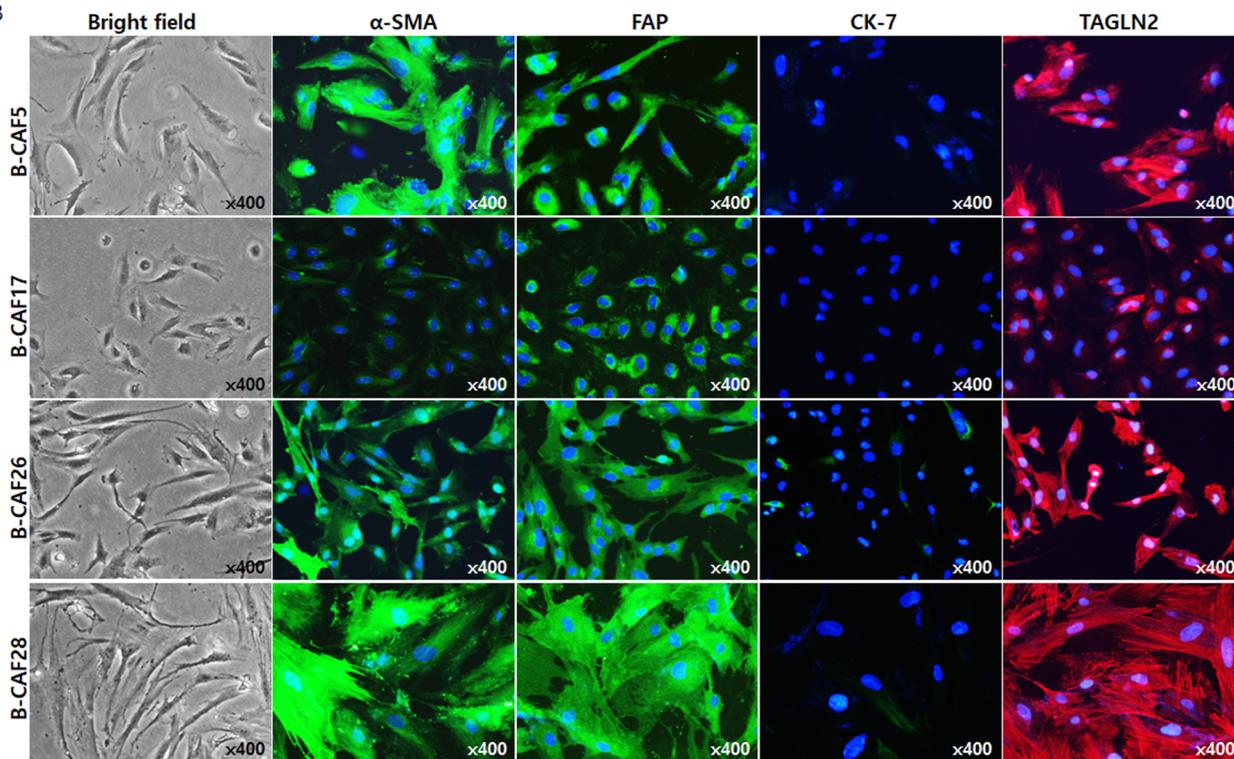


**Supplementary Fig. 7.** TAGLN2 expression in patient cancer tissues (100 $\times$ , 200 $\times$ )

A



B



**Supplementary Fig. 8.** TAGLN2 expression in patient tissues and cancer-associated fibroblasts. (A) IF findings in BTC tissue show overexpression of TAGLN2 in the stroma of BTC tissue, and its location coincided with  $\alpha$ -SMA expression (100 $\times$ , 200 $\times$ ) (B) TAGLN2 expression in the CAFs from BTC assessed using IF (400 $\times$ );  $\alpha$ -SMA, alpha-smooth muscle actin; IF, Immunofluorescence.