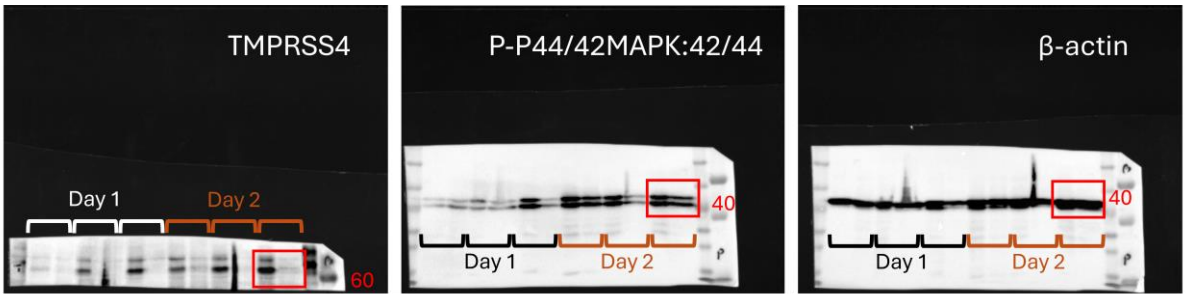
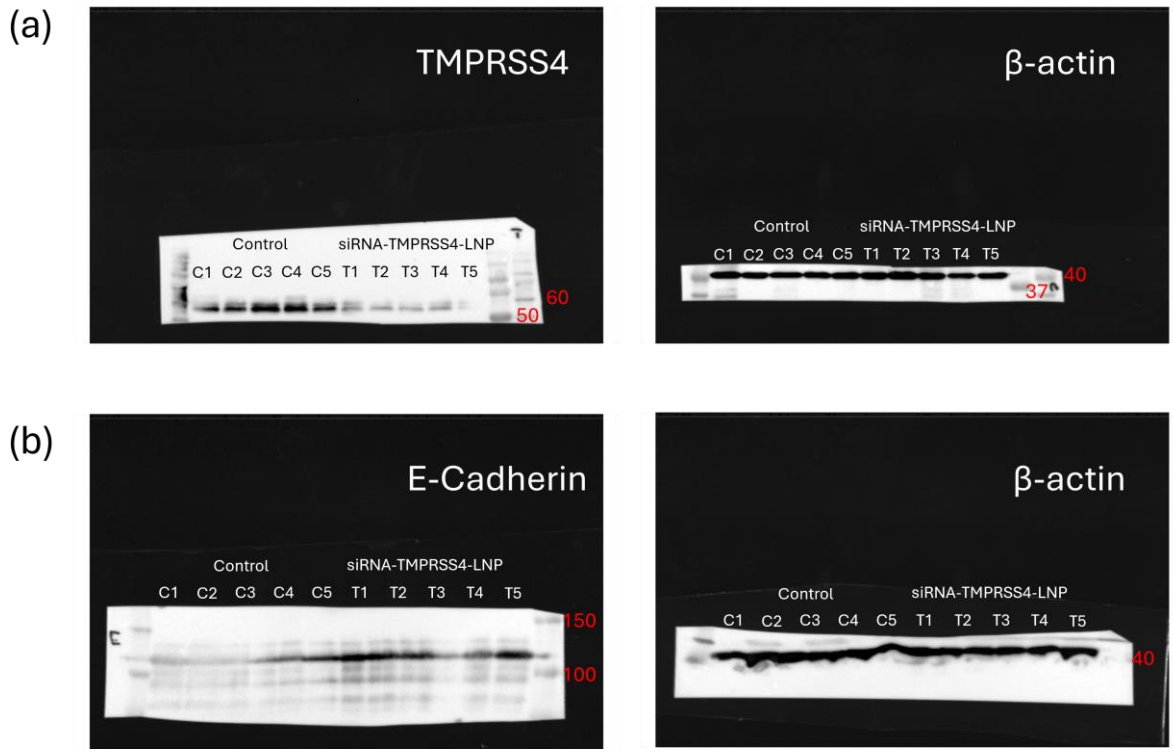
Supplementary Figure S1.



In vitro silencing of transmembrane serine protease 4 (TMPRSS4) suppresses ERK1/2 signal in NUGC-3 gastric cancer cells. We observed NUGC3 day 1 and day 2 after transfected with TMPRSS4-siRNA. Full-length of western blot comparing TMPRSS4, phospho-p44/42MAPK, p44/42MAPK, and β-actin. The red-lined area is the part used in Figure 1a.

Supplementary Figure S2.



High dose of small interfering (si)-transmembrane serine protease 4 (TMPRSS4)-lipid nanoparticle in combination with fluorouracil suppressed the expression of TMPRSS-4 in tumors and enhanced the expression of E-cadherin in tumor *in vivo*. a. Full-length of western blotting comparing TMPRSS4 and β-actin. b. Full-length of western blotting comparing E-cadherin and β-actin.