

Figure S1 (related to Figure 1). FadAc stimulate proliferation of human colon cancer cells via E-cadherin. A. Suppression of FadAc-stimulates cell growth by inhibiting E-cadherin. Purified FadAc lost stimulation of HCT116 growth when expression of E-cadherin was inhibited by siRNA, and by GST-EC5 fusion protein and the inhibitory peptide (IP), but not by non-specific siRNA, GST, or the control peptide (CP). B. Purified FadAc stimulates the growth of RKO cells expressing heterogeneous CDH1, but not mock-transfected RKO. Stimulation of CDH1-transfected RKO cells by purified FadAc was inhibited by GST-EC5 and the inhibitory peptide (IP), not by GST control and the control peptide (CP). The results are presented as mean \pm SD. *** p<0.001.

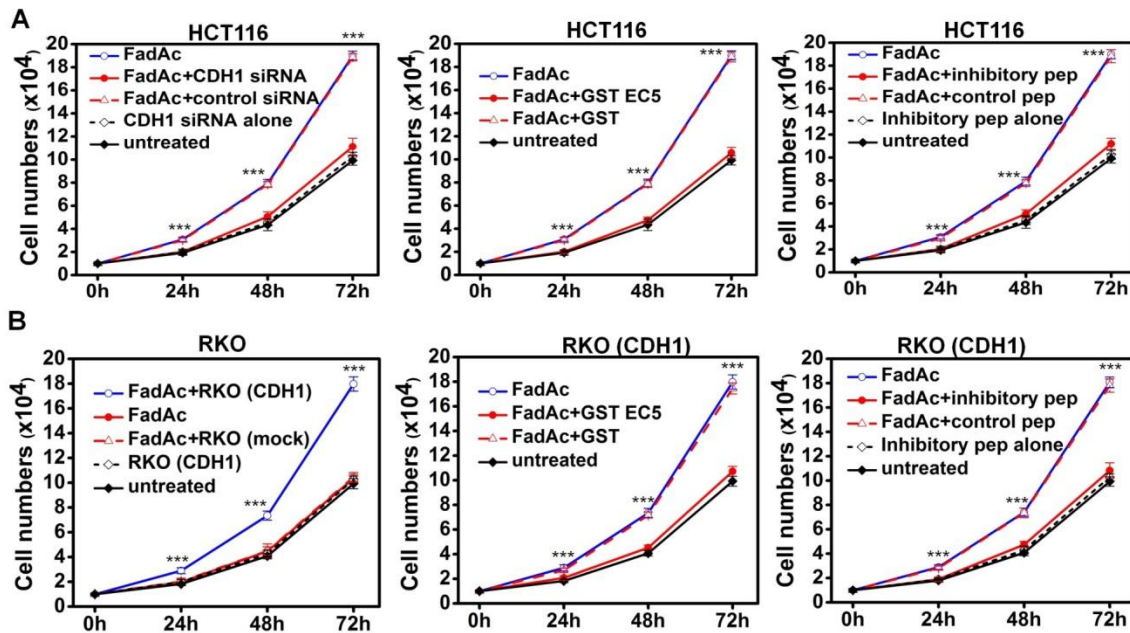


Figure S2 (related to Figure 2). FadA binds to region 3 in the EC5 domain of E-cadherin. Purified GST or GST-fusion proteins with various EC domains (EC1-2, 2-3, 3-4 and 4-5) (A) and with regions 1, 2, or 3 deleted from EC5 ($\Delta 1$, $\Delta 2$, $\Delta 3$) (B) were incubated with *E. coli* lysates expressing FadAc, followed by capture with GST resins. The eluted components were subjected to SDS-PAGE, followed by Coomassie blue staining (top panel) and Western blot (WB) using anti-FadA mAb 5G11-3G8 (bottom panel). C. Amino-acid sequence of the first half of the EC5 domain. Regions 1, 2, and 3 correspond to the deletions in B. The sequences corresponding to the inhibitory peptide (see Figure 2) are underlined.

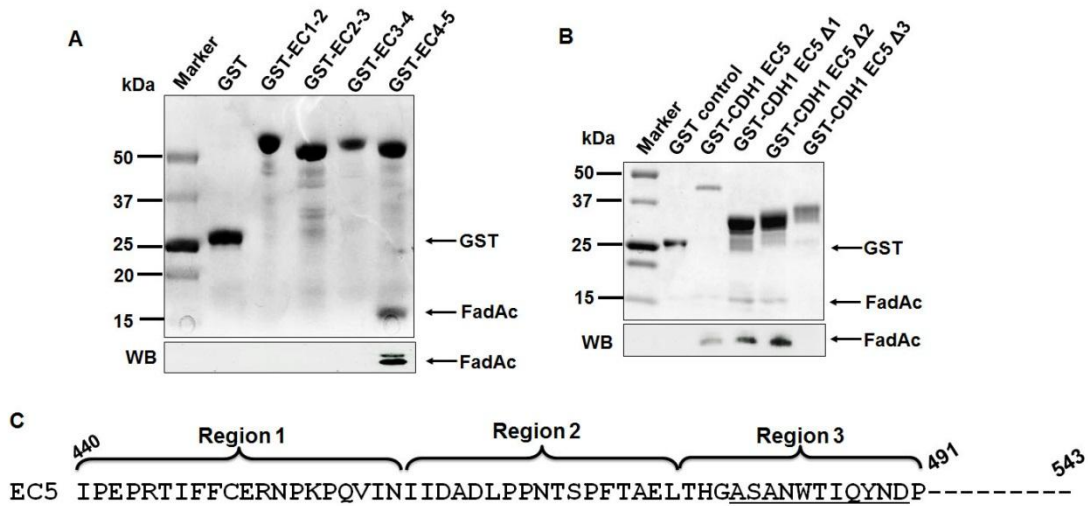


Figure S3 (related to Figure 3). *Fn* adheres to and invades HEK293 cells via FadA and E-cadherin (CDH1). A. *Fn* (*Fn*) and the *fadA*-complementing clone USF81 (*fadA*⁺) adhere to and invade HEK293 cells. The *fadA*-deletion mutant US1 (*fadA*⁻) is defective for attachment and invasion. Attachment and invasion by *Fn* and USF81 are significantly reduced by anti-E-cadherin (CDH1) monoclonal antibody HECD1. B. Inhibition of E-cadherin expression in HEK293 by siRNA significantly reduces attachment and invasion by wild type *Fn* and USF81 (*fadA*⁺). The results are presented as mean±SD.****p*<0.001.

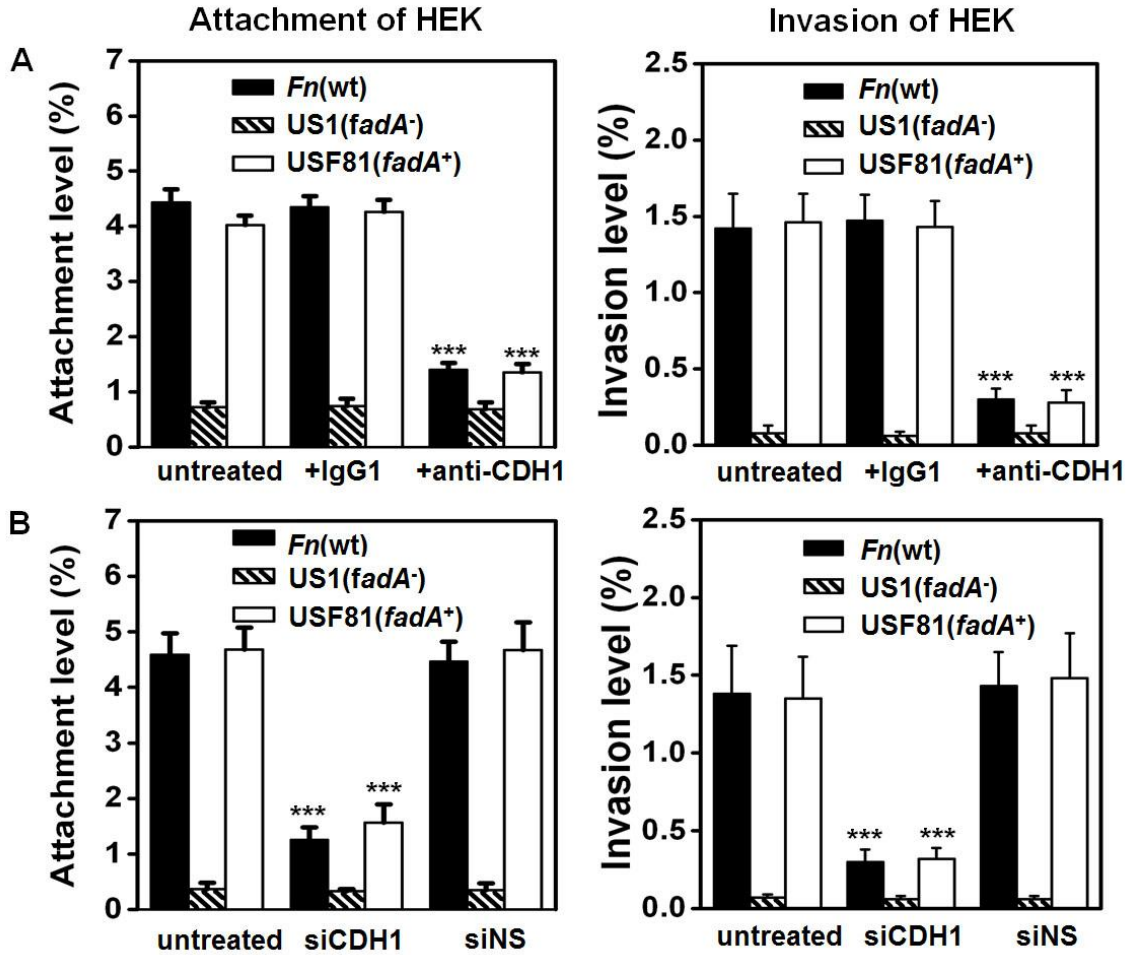


Figure S4 (related to Figure 6). FadA stimulates expression of Wnt, oncogenes and inflammatory genes in xenografts. Purified FadAc, but not mFadA or BSA, activates expression of NF-kappaB and pro-inflammatory cytokines IL-6, 8, and 18; Wnt 7a, 7b, and 9a; and Myc, and Cyclin D1 in HCT116 xenografts as determined by qPCR. The inhibitory peptide (IP) inhibits the stimulation, while the control peptide (CP) does not. Expression levels in BSA-treated xenografts are designated as “1”. The results are presented as mean±SD. *** p<0.001.

