

Figure S1 Combined application of CTX and PP242 reduces proliferation-related markers expression and increases apoptosis-related markers expression in CRC cells. HT-29 cells and Caco-2 cells were untreated or treated with 20 $\mu\text{g}/\text{mL}$ CTX and 1 $\mu\text{mol}/\text{L}$ PP242 alone or in combination for 96 h. (A,C) The protein content of cellular Ki-67, platelet endothelial cell adhesion molecule-1 (CD31), total and cleaved caspase-3 contents were determined by western blotting. (B,D) The semi-quantitative analysis of cellular Ki-67, CD31, total and cleaved caspase-3 contents was performed based on the relative density values of the bands of western blotting. The relative density value of the control group was set to one. Each bar represents the mean \pm SEM. All data were derived from at least three separate experiments. *, $P<0.05$; **, $P<0.01$. CTX, cetuximab; CRC, colorectal cancer. SEM, standard error of mean.

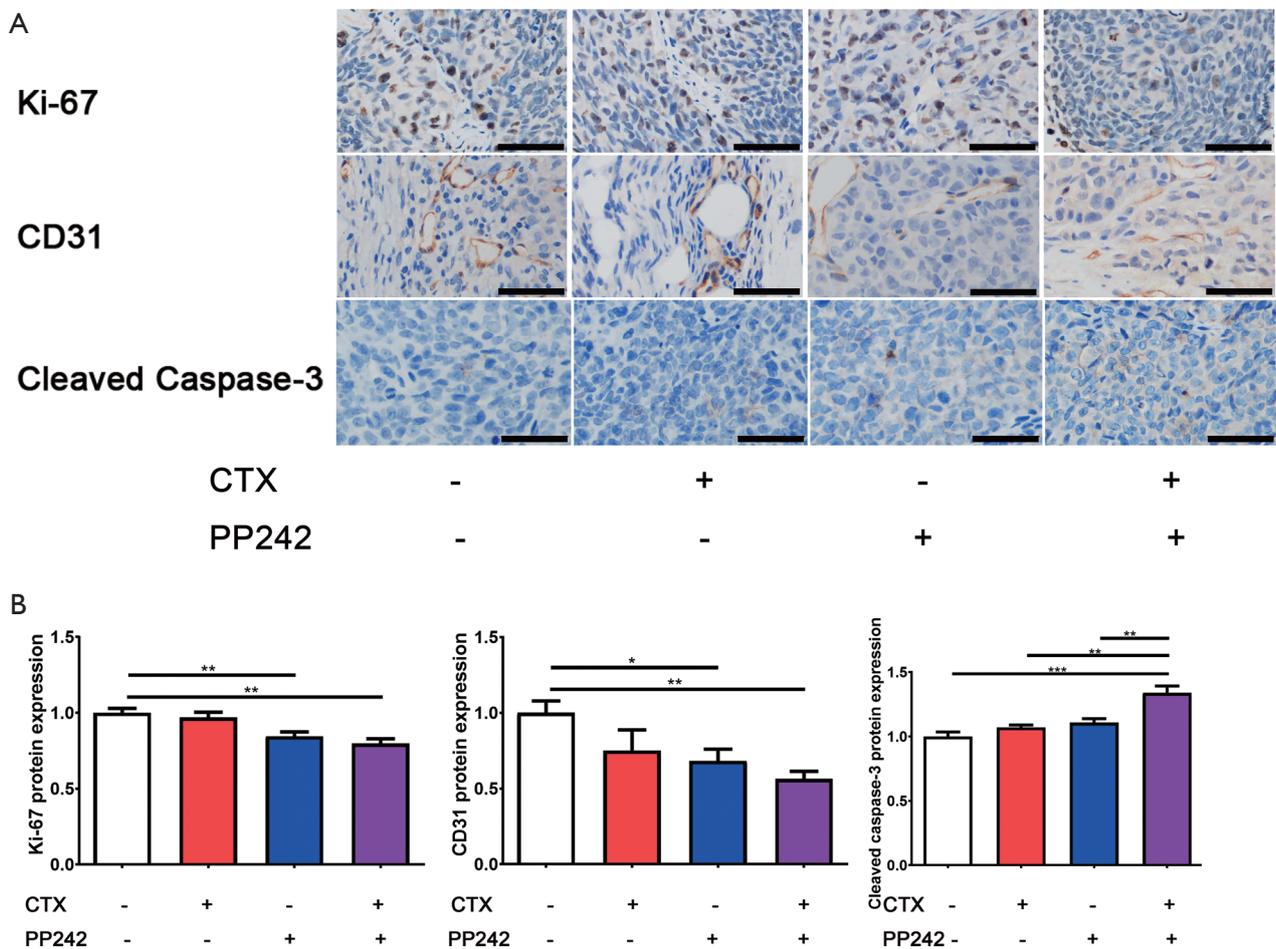


Figure S2 Combined application of CTX and PP242 reduces proliferation-related markers expression and increases apoptosis-related markers expression in mouse xenograft tumors. Six-week-old male BALB/c nude mice bearing HT-29 cell xenograft tumors were untreated or treated with 20 mg/kg CTX and 30 mg/kg PP242 alone or in combination twice a week. After 2 weeks of treatment, the xenograft tumor was removed and subjected to immunohistochemical analysis. (A) Microscopic view of Ki-67, CD31, and cleaved caspase-3 immunohistochemistry. (B) The semi-quantitative analysis of Ki-67, CD31, and cleaved caspase-3 immunohistochemistry. All data were derived from at least three separate fields of view under the microscope. The relative density value of the control group was set to 1. Each bar represents the mean \pm SEM. Scale bar: 50 μ m. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$. CTX, cetuximab. SEM, standard error of mean.

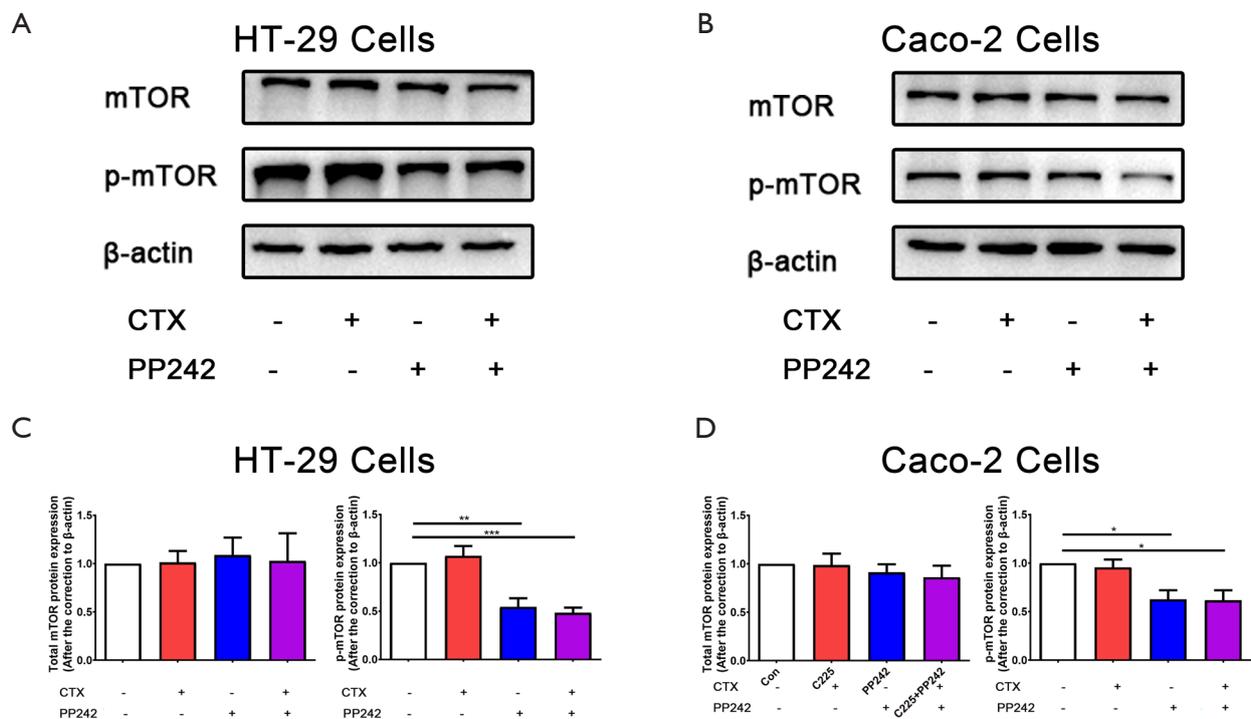


Figure S3 Application of PP242 inhibits the phosphorylation of mTOR in CRC cells. HT-29 cells and Caco-2 cells were untreated or treated with 20 $\mu\text{g}/\text{mL}$ CTX and 1 $\mu\text{mol}/\text{L}$ PP242 alone or in combination for 96 h. (A,B) The protein content of cellular total and phosphorylated mTOR were determined by western blotting. (C,D) The semi-quantitative analysis of cellular total and phosphorylated mTOR contents was performed based on the relative density values of the bands of western blotting. The relative density value of the control group was set to one. Each bar represents the mean \pm SEM. All data were derived from at least three separate experiments. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$. mTOR, mammalian target of the rapamycin; CRC, colorectal cancer. SEM, standard error of mean.