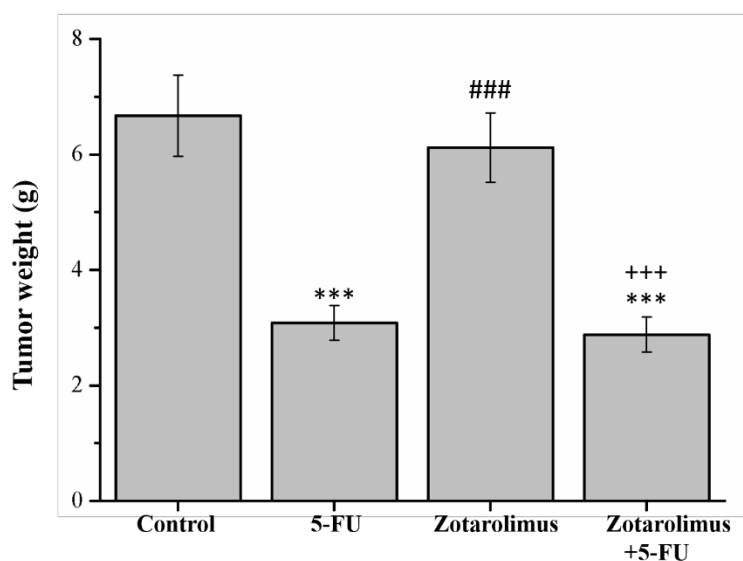Supplementary materials

Figure S1. Tumor weight in BALB/cByJNarl mice post-sacrifice, measured after mice were administered different treatments, including control, 5-FU (50 mg/kg/week), zotarolimus (1 mg/kg/day), and zotarolimus (1 mg/kg/day) combined with 5-FU (50 mg/kg/week). All data are mean ± standard deviation, n = 8 per group. ***$p < 0.001$ compared with the control group. ###$p < 0.001$ compared with the 5-FU–treated group. +++$p < 0.001$ compared with the zotarolimus–treated group.
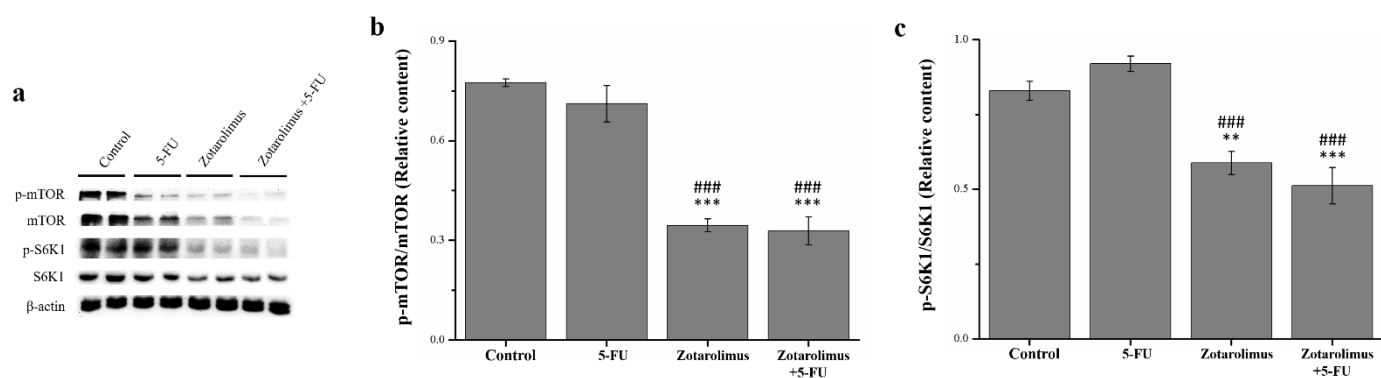
Figure S2. Western blot analysis of (a) mTOR signaling and relative quantitative expression of (b) mTOR phosphorylation and (b) S6K1 phosphorylation in HCT-116 tumors taken from BALB/cByJNarl mice administered different treatments, including control, 5-FU (50 mg/kg/week), zotarolimus (2 mg/kg/day), and a combination of zotarolimus (2 mg/kg/day) and 5-FU (50 mg/kg/week). All data are presented as mean ± standard deviation, n = 8 per group. *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$ compared with the control group. ##$p < 0.01$ and ###$p < 0.001$ compared with the 5-FU–treated group. ++$p < 0.01$ compared with the zotarolimus-treated group.
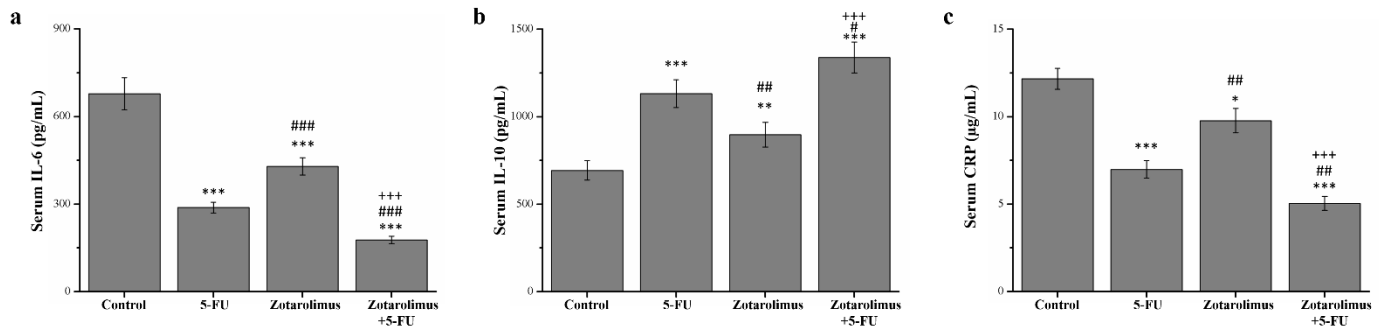
Figure S3. Changes in serum levels of (a) IL-6, (b) IL-10, and (c) CRP measured in BALB/cByJNarl mice administered different treatments, including control, 5-FU (50 mg/kg/week), zotarolimus (2 mg/kg/day), and a combination of zotarolimus (2 mg/kg/day) and 5-FU (50 mg/kg/week). All data are presented as mean ± standard deviation, n = 8 per group. *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$ compared with the control group. #$p < 0.05$, ##$p < 0.01$, and ###$p < 0.001$ compared with the 5-FU group. +++$p < 0.001$ compared with the zotarolimus group.
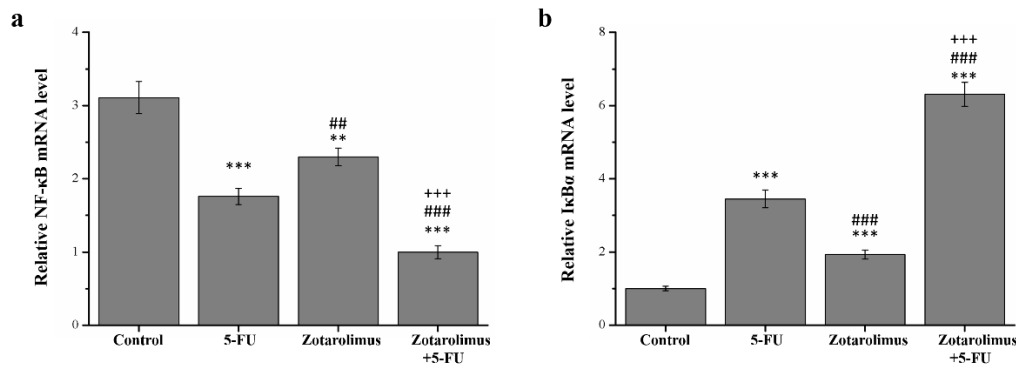
Figure S4. Relative gene mRNA expression of (a) *NF-κB* and (b) *IκBα* using quantitative PCR. All experiments were conducted on the HCT-116 tumor masses from BALB/cByJNarl mice administered different treatments, including control, 5-FU (50 mg/kg/week), zotarolimus (2 mg/kg/day), and a combination of zotarolimus (2 mg/kg/day) and 5-FU (50 mg/kg/week). All data are presented as mean ± standard deviation, n = 8 per group. **$p < 0.01$ and ***$p < 0.001$ compared with the control group. ##$p < 0.01$ and ###$p < 0.001$ compared with the 5-FU group. +++$p < 0.001$ compared with the zotarolimus group.
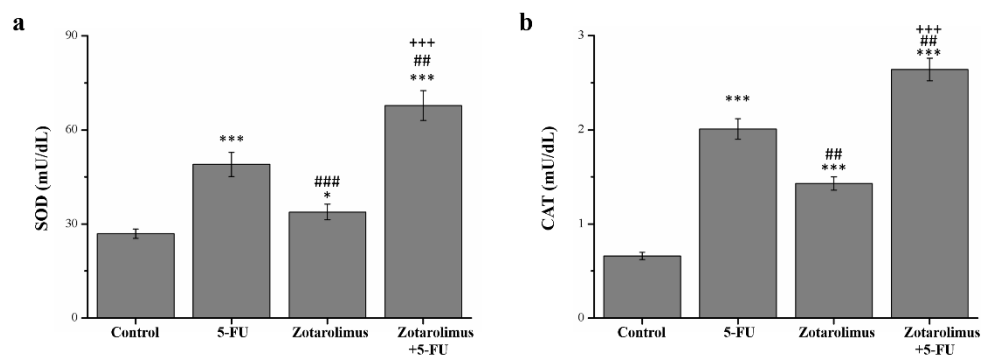
Figure S5. Serum level changes in (a) SOD and (b) CAT measured in BALB/cByJNarl mice administered different treatments, including control, 5-FU (50 mg/kg/week), zotarolimus (2 mg/kg/day), and a combination of zotarolimus (2 mg/kg/day) and 5-FU (50 mg/kg/week). All data are shown as mean ± standard deviation, n = 8 per group. *$p < 0.05$ and ***$p < 0.001$ compared with the control group. #$p < 0.05$, ##$p < 0.01$, and ###$p < 0.001$ compared with 5-FU group. +++$p < 0.001$ compared with zotarolimus group.