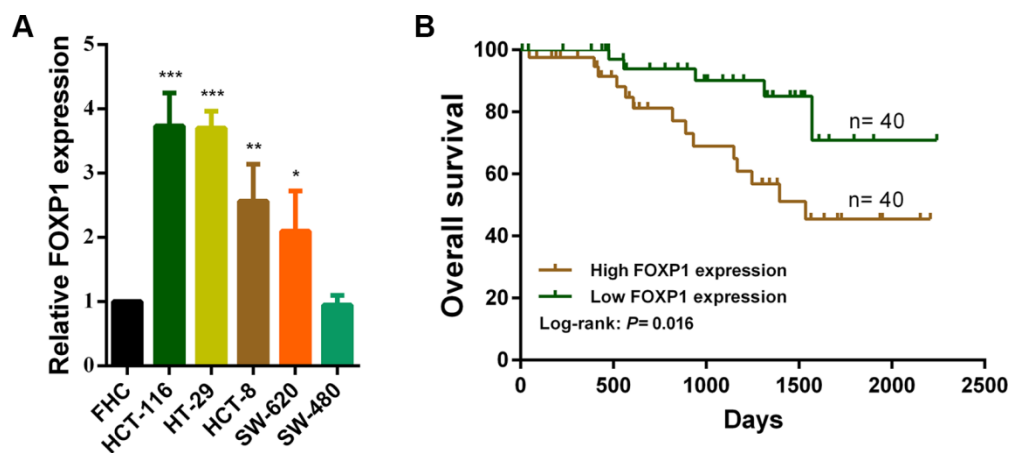
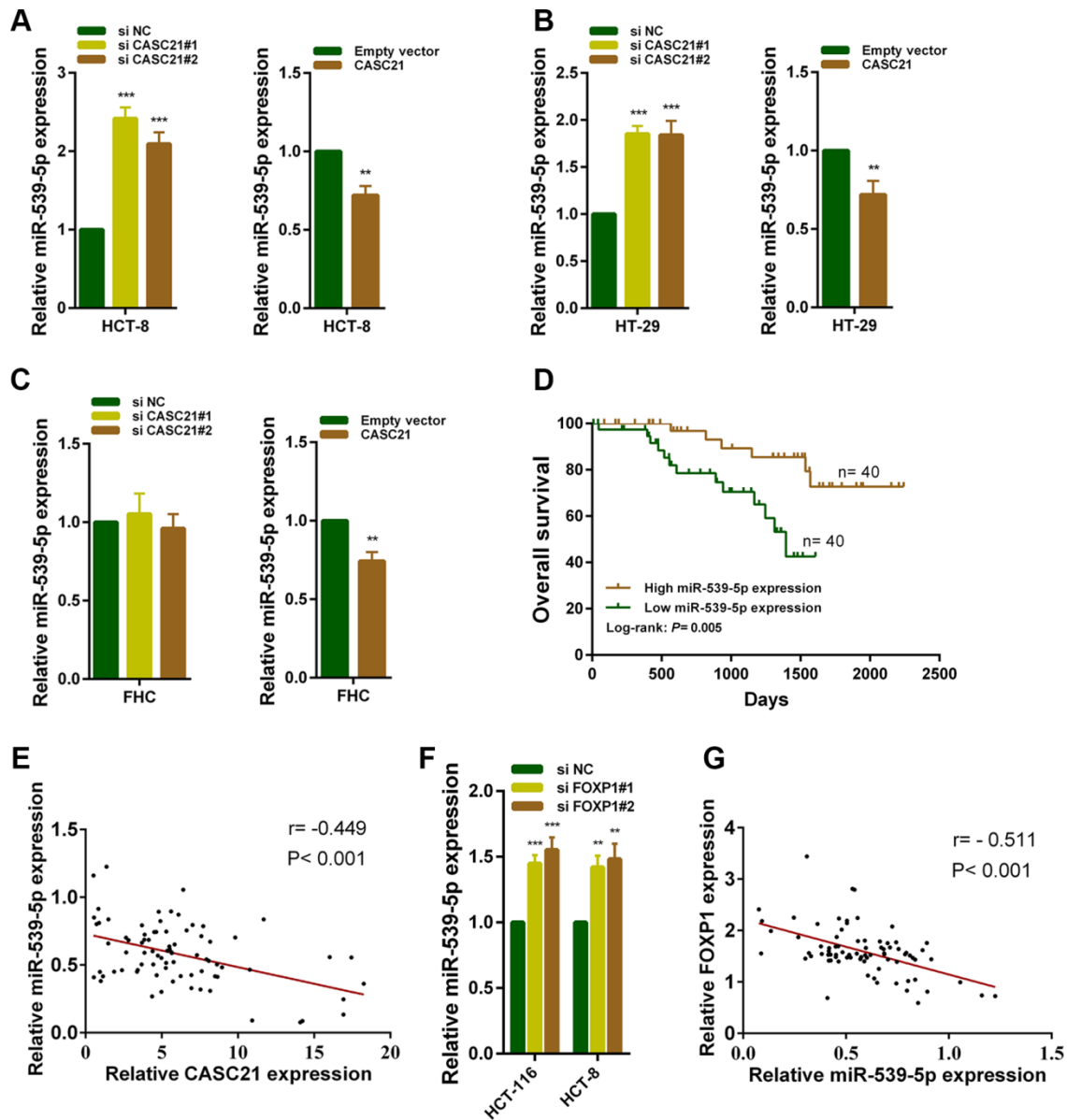


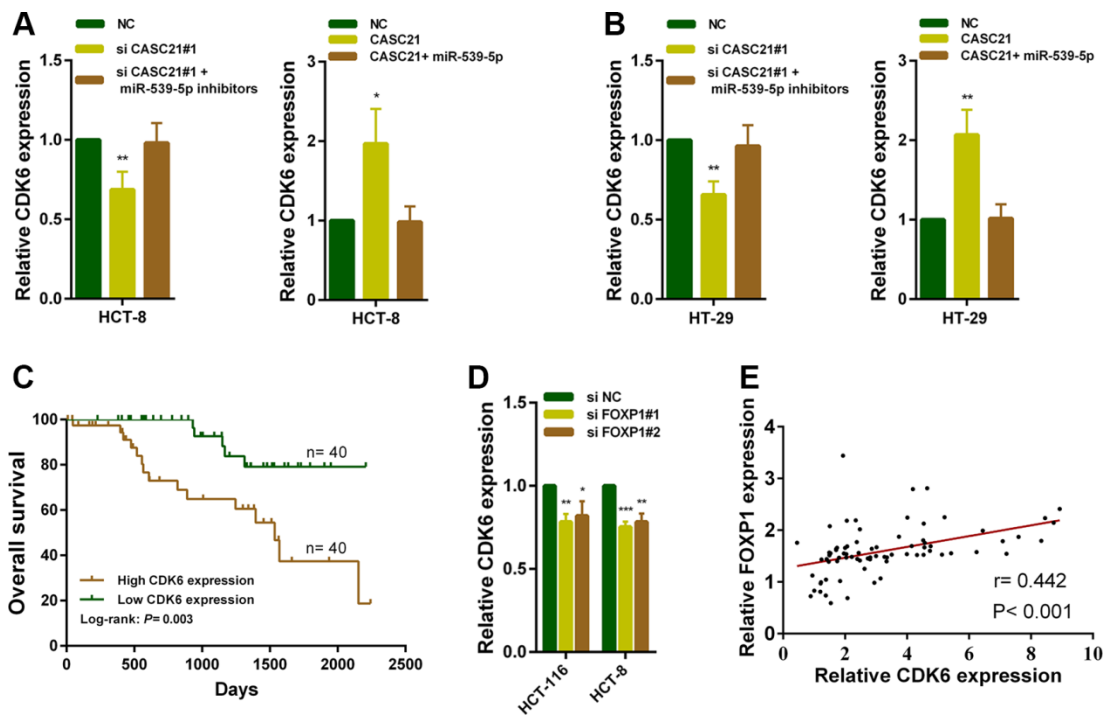
SUPPLEMENTARY FIGURES



Supplementary Figure 1. FOXP1 is highly expressed in CRC cells and its high expression predicts poor prognosis. (A) FOXP1 expression in CRC cell lines (HT-29, HCT-116, SW-620, HCT-8 and SW-480) and normal colorectal epithelial cell FHC detected by qRT-PCR. (B) Kaplan-Meier survival analysis of CRC patients' overall survival in cohort 1 based on FOXP1 expression (n= 80, P= 0.016).



Supplementary Figure 2. CASC21 functioned as a molecular sponge for miR-539-5p. (A) MiR-539-5p expression was detected in HCT-8 cells transfected with CASC21 siRNAs or CASC21 overexpression vector by qRT-PCR. (B) MiR-539-5p expression was detected in HT-29 cells transfected with CASC21 siRNAs or CASC21 overexpression vector by qRT-PCR. (C) MiR-539-5p expression was detected in FHC cells transfected with CASC21 siRNAs or CASC21 overexpression vector by qRT-PCR. (D) Kaplan-Meier survival analysis of CRC patients' overall survival in cohort 1 based on miR-539-5p expression (n = 80, P = 0.005). (E) The correlation between CASC21 and miR-539-5p was analyzed in 80 paired CRC samples (n = 80, r = -0.449, P < 0.001). (F) MiR-539-5p expression was detected in HCT-116 and HCT-8 cells transfected with FOXP1 siRNAs by qRT-PCR. (G) The correlation between FOXP1 and miR-539-5p was analyzed in 80 paired CRC samples (n = 80, r = -0.511, P < 0.001).



Supplementary Figure 3. CASC21 increased CDK6 expression by absorbing miR-539-5p in CRC. (A, B) CDK6 expression was detected by qRT-PCR in HCT-8 or HT-29 cells with indicated treatment. (C) Kaplan-Meier survival analysis of CRC patients' overall survival in cohort 1 based on CDK6 expression ($n=80$, $P=0.003$). (D) CDK6 expression was detected in HCT-116 and HCT-8 cells transfected with FOXP1 siRNAs by qRT-PCR. (E) The correlation between CDK6 and FOXP1 was analyzed in 80 paired CRC samples ($n=80$, $r=0.442$, $P<0.001$).