

Supplementary Materials and Methods

Cell culture

DLD-1, SW480 and HCT116 cells were maintained in Dulbecco's modified Eagle's medium (DMEM) supplemented with 10% fetal bovine serum.

TaqMan miRNA assays

miRNA expression was quantified using TaqMan microRNA assays (ABI, Life Technologies Carlsbad, CA, USA). Total RNA (10ng) was reversed transcribed using miRNA specific primers and the TaqMan Reverse Transcription Kit (ABI, Life Technologies). TaqMan miRNA assays were performed on StepOnePlus (ABI, Life Technologies), using the TaqMan Universal PCR Master Mix (ABI, Life Technologies). Expression changes of paired samples were determined by $\Delta\Delta\text{Ct}$ approach. Values were normalized to the endogenous control of U6 snRNA.

Quantitative reverse transcription PCR

Reverse transcription was performed using total RNA isolated from cultured cells and the PrimeScript RT reagent kit (Takara Bio, Shiga, Japan). The resulting cDNA was amplified by real-time PCR using the Real Time System (Takara Bio) and SYBR Green PCR Mastermix (Takara Bio). The primer sequences were as follows: 5'-AGGTGAAGAACCCACAGAAGG-3' and 5'-TAGAAGACTGGCGGAAAGAGC-3' for CAT1; 5'-AGAAGGATTCCTATGTGGGC-3' and 5'-ATAGCACAGCCTGGATAGCA-3' for β actin. Data were normalized to β actin mRNA levels.