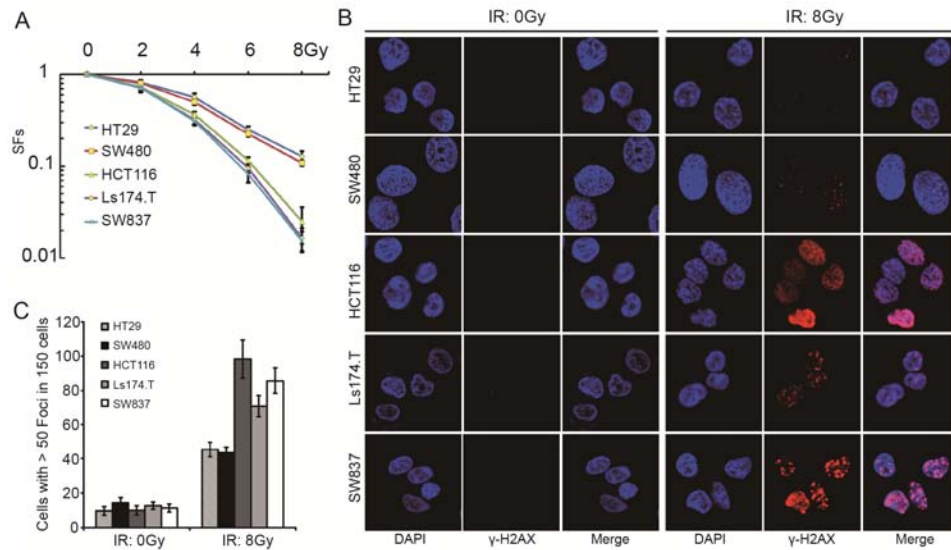
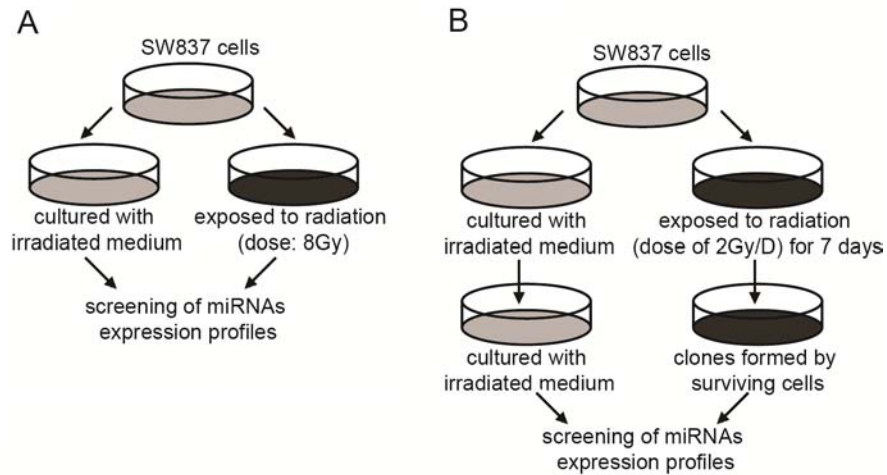


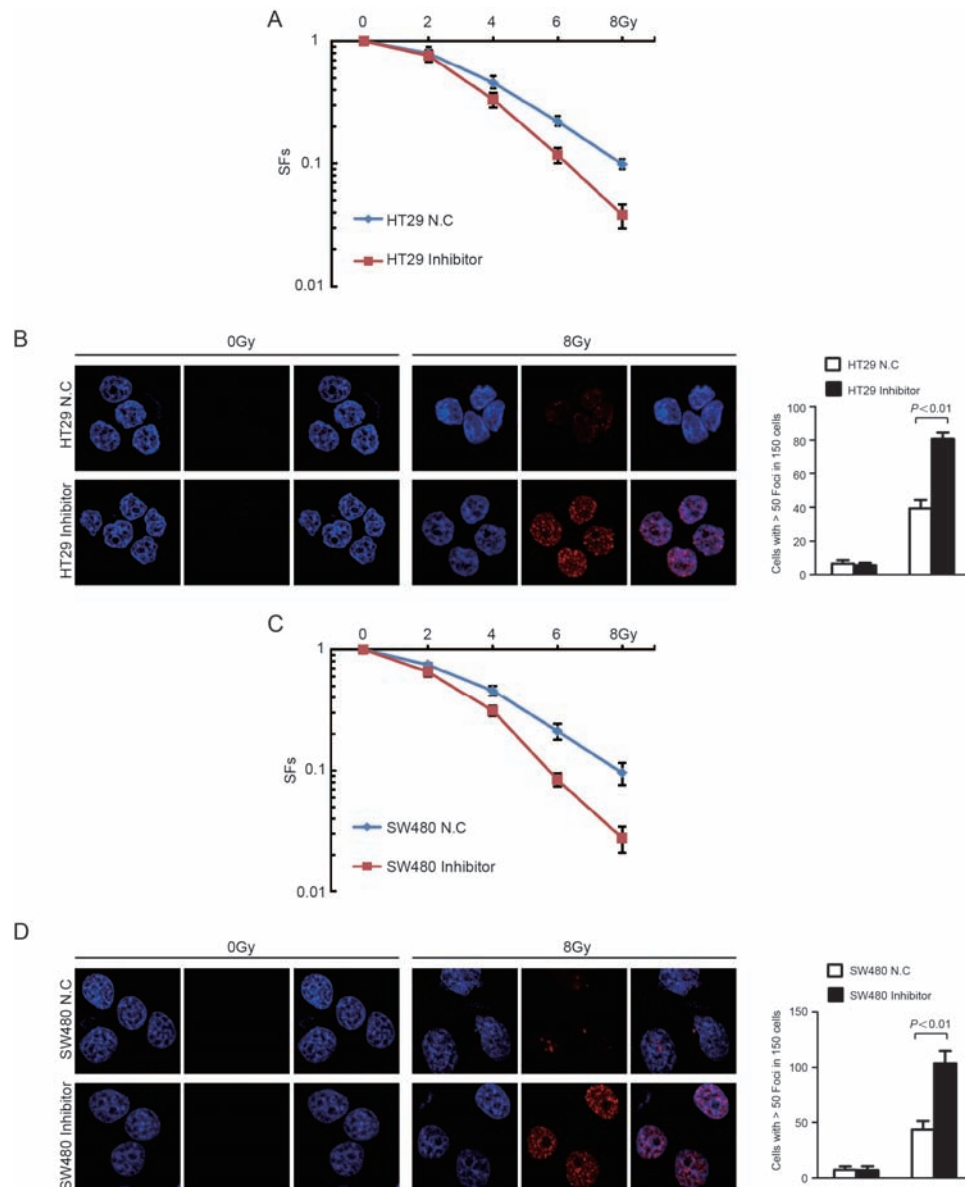
SUPPLEMENTARY FIGURES AND TABLE



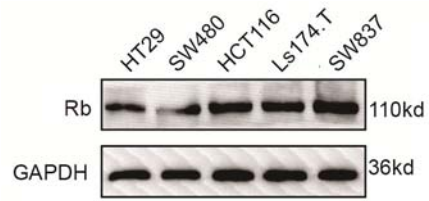
Supplementary Figure S1: SFs and γ -H2AX expression of five CRC cell lines in response to IR. A. SFs of five CRC cell lines were irradiated with graded doses of X-rays. SFs was calculated as the number of colonies counted/(the number of cells seeded \times plating efficiency/100). B. and C. IF and quantitative analysis of γ -H2AX in five CRC cells. SFs = survival fractions, CRC = colorectal cancer, IF = immunofluorescence.



Supplementary Figure S2: Screening of miRNAs expression profiles. A. Schematic outline of tumor-related miRNA expression profiles in response to IR of SW837 cells. B. Schematic outline of tumor-related miRNA expression profiles in surviving SW837 cells after IR (2 Gy/day) for 7 days. IR = ionizing radiation.



Supplementary Figure S3: Down-regulation of miRNA-622 promotes radiosensitivity of CRC in vitro. **A.** SFs of HT29 cells transfected by anti-miR-622 inhibitor and inhibitor control. **B.** IF and quantitative analysis of γ -H2AX in HT29 cells transfected by anti-miR-622 inhibitor and inhibitor control. **C.** SFs of SW480 transfected by anti-miR-622 inhibitors and inhibitor control. **D.** IF and quantitative analysis of γ -H2AX in SW480 cells transfected by anti-miR-622 inhibitors and inhibitor control. SFs = survival fractions, CRC = colorectal cancer, IF = immunofluorescence.



Supplementary Figure S4: Rb expression of five CRC cell lines. GAPDH was an internal control. CRC = colorectal cancer.

Supplementary Table S1. Sequence of Primer for ChIP, qRT-PCR and 3'UTR PCR

Gene	Sequence
ChIP Primer	
hCasp7 forward	5'-TTTGGGCACTTGGAGCGCG-3'
hCasp7 reverse	5'-AAGAGCCCAAAGCGACCCGT 3'
hTAp73 forward	5'-TGAGCCATGAAGATGTGCGAG-3'
hTAp73 reverse	5'-GCTGCTTATGGTCTGATGCTTATGG-3'
qRT-PCR Primer	
GAPDH forward	5'-CCATCAATGACCCCTTCATTGACC-3'
GAPDH reverse	5'-GAAGGCCATGCCAGTGAGCTTCC-3'
TAp73 forward	5'-CATGGAGACGAGGACACGTA-3'
TAp73 reverse	5'-CTGTAACCCTTGGGAGGTGA-3'
Caspase7 forward	5'-GCAGTGGGATTTGTGCTTCT-3'
Caspase7 reverse	5'-CCCTAAAGTGGGCTGTCAAA-3'
RB1 forward	5'-CTCTCGTCAGGCTTGAGTTTG-3'
RB1 reverse	5'-GACATCTCATCTAGGTCAACTGC-3'
3'UTR PCR Primer	
E2F1 forward	5'-ATTCTGACAGGGCTTGGAGGGACC-3'
E2F1 reverse	5'-GGTTTTAATAAATATTTTGATGACGTT-3'
E2F8 forward	5'-TCAACAGATGTTGGCTTAGTTTAA-3'
E2F8 reverse	5'-CAAATTA AAACTTTTCTAAAATATA-3'
RB1 forward	5'-TTGTCTCTCACAGATGTGACTGTAT-3'
RB1 reverse	5'-AGGTCAAGGGCTTACTATTTCTGGG-3'