Supporting Information for

"Targeted proteomic analysis of small GTPases in radioresistant breast cancer cells"

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Table S1: Primers and Oligonucleotide Sequences

Gene		**Oligonucleotides**
ARFRP1	shRNA-1	CGAAGACAAACTTTCCTCTAT
	shRNA-2	CCTCTCAATCCCTGACATCAA
	shRNA-3	GCAGTCTTTGTGGGACAAGTA
Genes	**qPCR Forward primers**	**qPCR Reverse primers**
ARFRP1	GTACAAGTACATGTTTCAGA	TCCTGGGCCTGGACAATGCT
IFT27	GCTCTTGTCCTCTGGGTACG	GTCTCCCGTGTCAGGAACTG

Figure S1. IFT27 is up-regulated in the radio-resistant lines of MDA-MB-231 and MCF7 cells. (A) MRM traces of a representative peptide (CILAGDPAVGK), where the underlined C represents carbamidomethylated cysteine, from IFT27 in MDA-MB-231/C5 and MCF7/C6 pairs of breast cancer cells. (B) Western blot for validating MRM results for IFT27 in MDA-MB-231/C5 and MCF7/C6 pairs of cells. (C) Relative levels of expression of IFT27 protein in the two pairs of cell lines as obtained from MRM and Western blot analyses. Error bars represent S.D. (n=3).

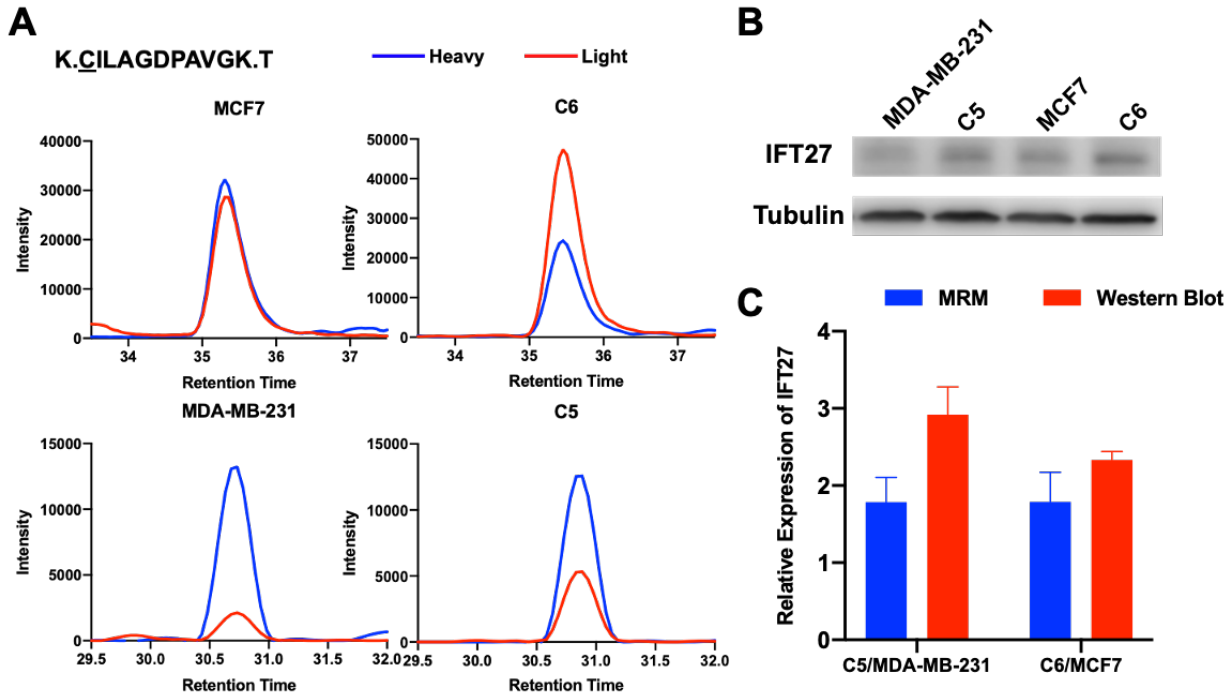

Figure S2. Real-time qPCR showing the mRNA expression levels of *IFT27* and *ARFRP1* genes in MDA-MB-231/C5 and MCF7/C6 pairs of breast cancer cells. Shown are Log_2 ratio of expression levels in radioresistant over parental cell lines. The data represent the mean ± S.D. of results obtained from three biological replicates.

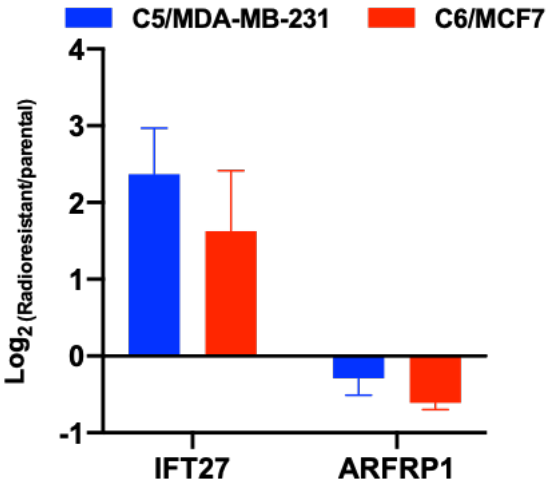

Figure S3. Down-regulation of ARFRP1 led to elevated radioresistance in MCF7 cells. (A) Validation of knockdown efficiency of ARFRP1 in MCF7 cells by Western blot analysis. (B) Survival rates of MCF7 cells treated with control or ARFRP1 shRNA and exposed with the indicated doses of γ rays. Error bars represent S.D. of results from three independent experiments. *p* values were calculated using unpaired, two-tailed Student's *t*-test: ***, $p < 0.001$.