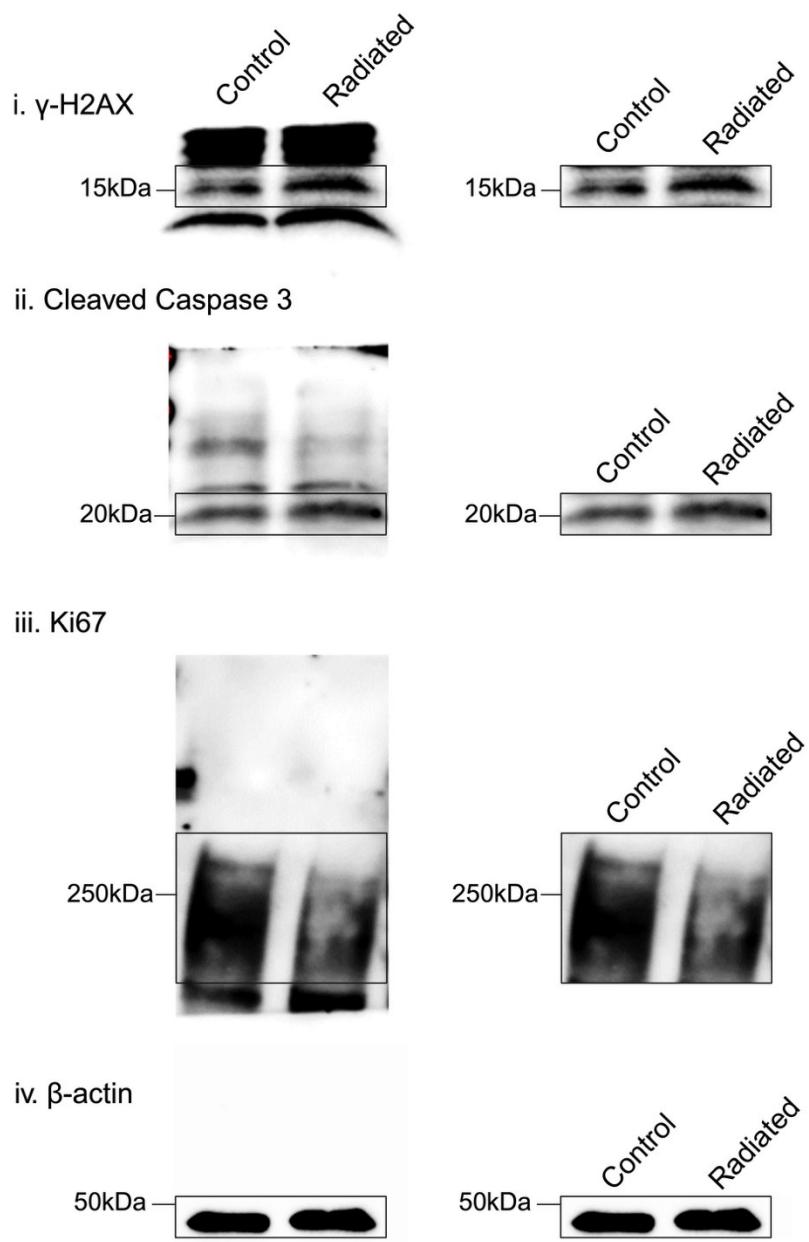


	10kHz	20kHz	40kHz	60kHz	80kHz	100kHz
Experiment 1		*	*	*	*	*
Experiment 2				*	**	**
Experiment 3		**	***	****	****	****

Supplementary table 1. Distinction of spheroid size by low-frequency impedance measurement replicate experiments. Table depicts at which evaluated discrete frequencies significant differences were found between the spheroids seeded with 2000 and 4000 cells.

	60kHz	80kHz	100kHz	200kHz	300kHz	400kHz	500kHz	600kHz	700kHz	800kHz	900kHz	1MHz	2MHz	3MHz	4MHz	6MHz	8MHz
Experiment 1					*	**		**	**	**	**		*	**	*		
Experiment 2					*	*	**		**	**	**	*		**	**		
Experiment 3				*	**	**	**	**	*	*	**	**	**	*	*		

Supplementary table 2. Replicate experiments for impedance measurements of 3D spheroids 3 days after radiation treatment. Table depicts at which evaluated discrete frequencies significant differences were found between the control and spheroids irradiated at 4Gy.



Supplementary figure 1. Raw western blot data for the evaluated biomarkers related to radiation response that may influence changing spheroid opacity.