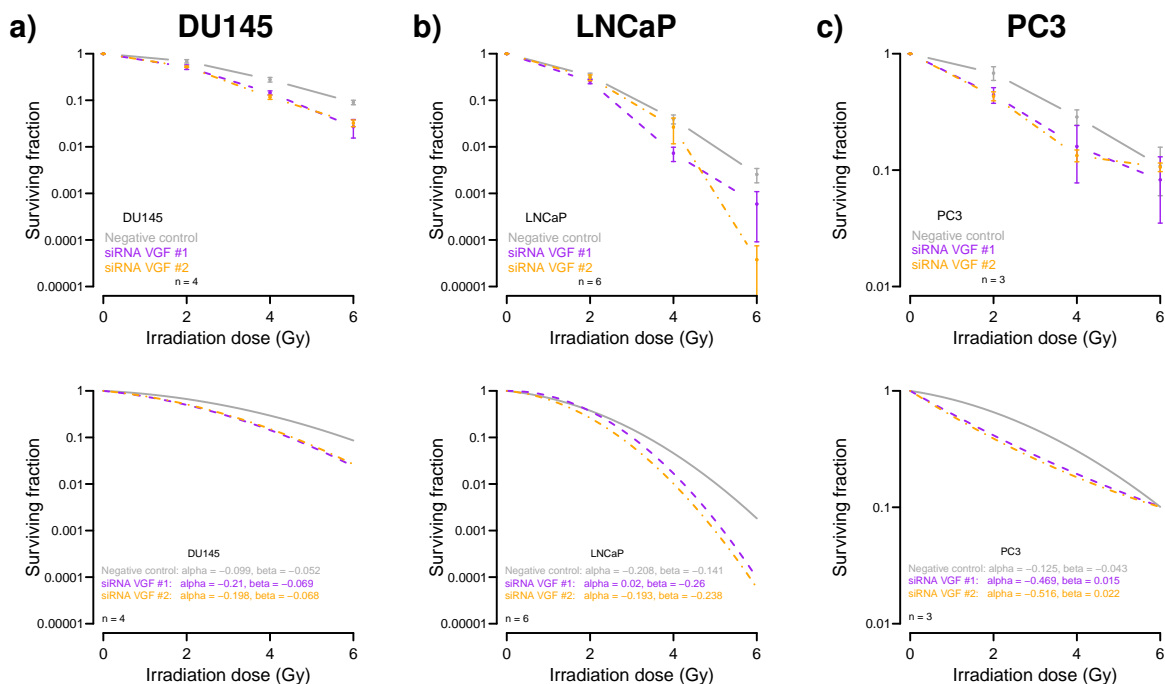


S11 Figure: LQ model fits of clonogenic survival.



S11 Figure: Comparison of raw clonogenic survival data (first row) to linear-quadratic (LQ) models of clonogenic survival data (second row). LQ models were fitted to the experimentally measured survival fraction of cells of each specific experiment to obtain a model-based clonogenic survival curve that enables to obtain the surviving fraction of cells for a given irradiation dose using the R package CFAssay (Brasemann et al. (2015)). The underlying survival curve is described by $S(d) = \exp(\alpha \cdot d + \beta \cdot d^2)$, where d specifies the irradiation dose and α and β represent the model parameters directly learned from the experimental data. Shown are the clonogenic survival curves for the cell lines DU145 (a), LNCaP (b), and PC3 (c) comparing VGF knockdowns by siRNA VGF #1 and siRNA VGF #2 to scrambled siRNAs (negative control). The number of biological replicates done for each cell line is denoted by 'n' and the obtained experiment-specific 'alpha' and 'beta' values are shown. Underlying measurements of DU145 and LNCaP were obtained from the parental cell lines (S7 Table).