

Supplementary Material

Acid Sphingomyelinase-Ceramide Induced Vascular Injury Determines Colorectal Cancer Stem Cell Fate

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Figure S1

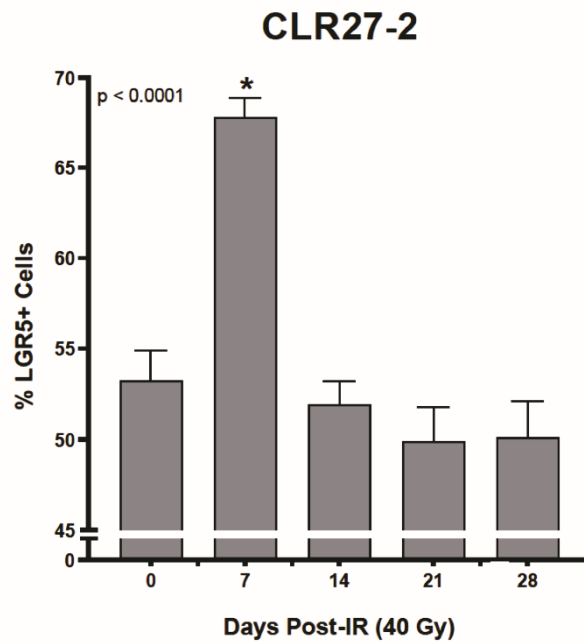


Figure S1. Elevated post-radiation concentration of radioresistant Lgr5+ tumor stem cells resolves over time. Mice harboring 100-150 mm³ radioresistant CLR27-2 CRC PDXs and treated with 40 Gy SDRT as in Fig. 3 were sacrificed on the indicated days post irradiation. Data (mean ± SEM) are derived from 10-15 microscopic images from 3-4 mice per group.

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Figure S2

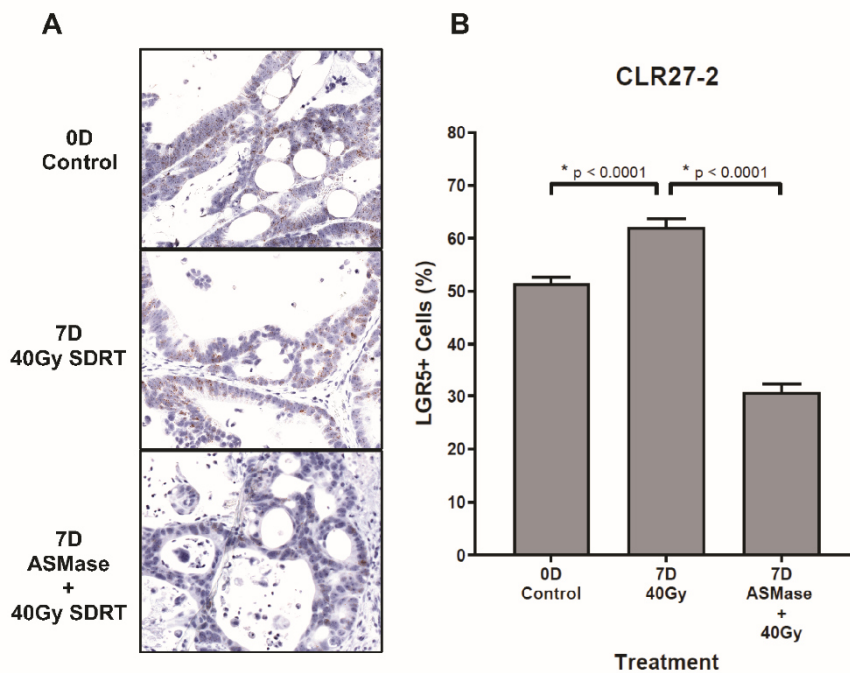


Figure S2. Genetic upregulation of ASMase sensitizes radioresistant Lgr5+ stem cells. NSG mice harboring 100-150 mm³ radioresistant CLR27-2 CRC PDXs were administered H2E-PPE1(3x)-ASMase at 5 days preceding 40Gy SDRT as in Fig. 6. Enrichment of Lgr5+ stem cells is abolished by ASMase gene therapy. Representative brightfield ISH images (A) of CLR27-2 PDXs were taken at 0 and 7 days post SDRT, with and without ASMase treatment, and quantified in (B). Data (mean \pm SEM) represent 10- 15 microscopic images (40x) from 2-4 mice per group.

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