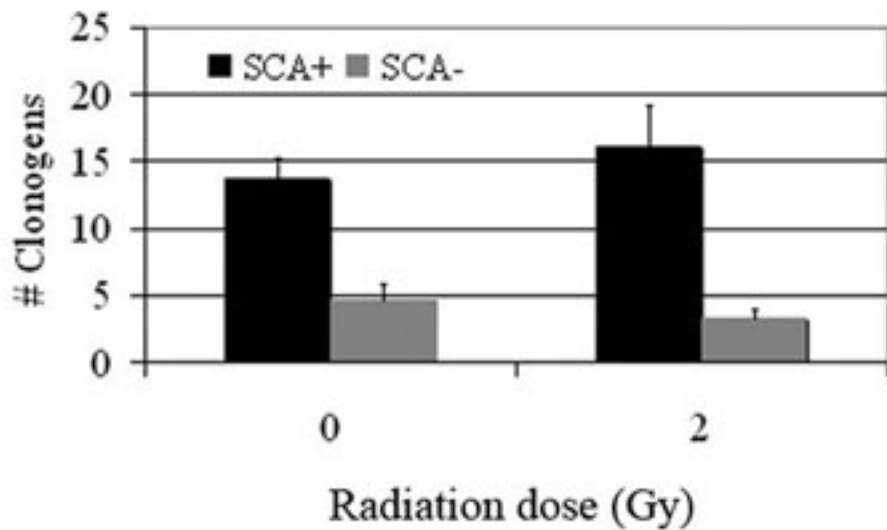
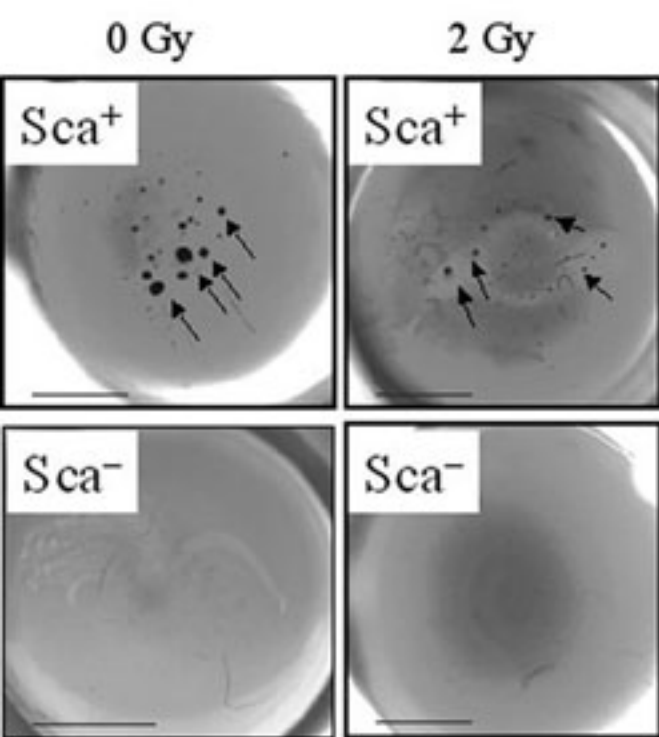
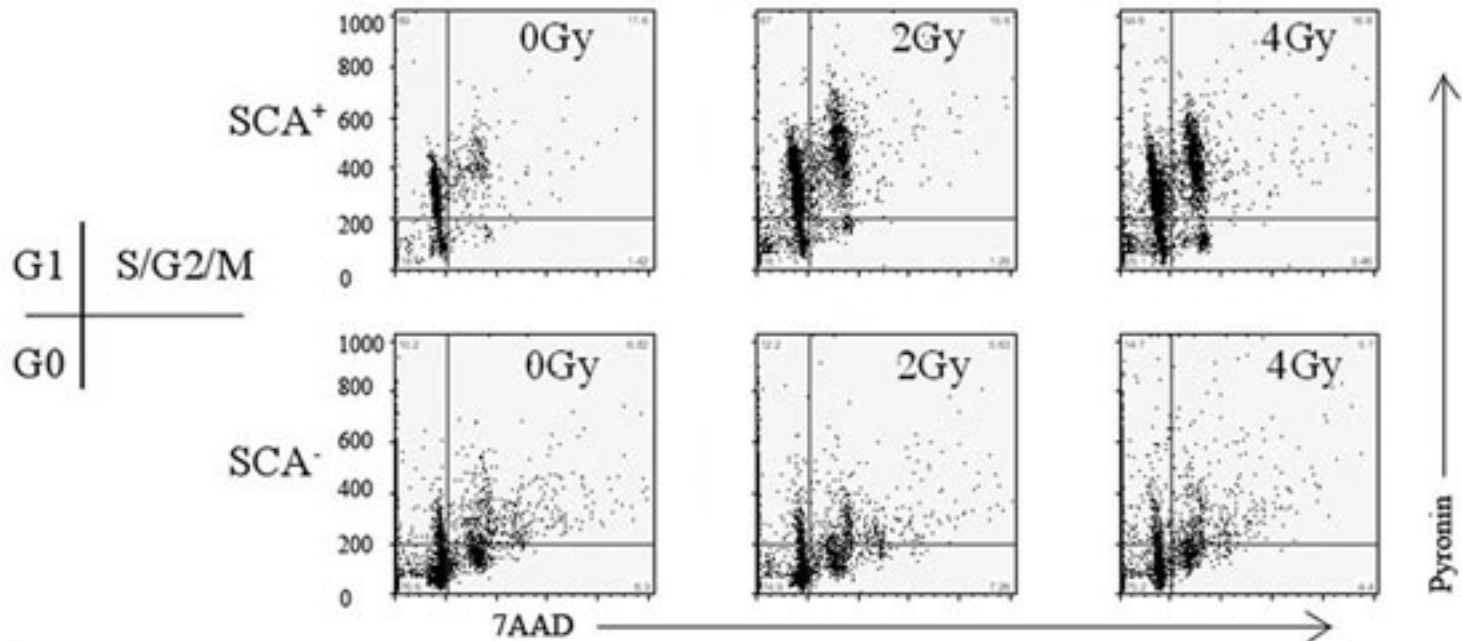


SI Methods

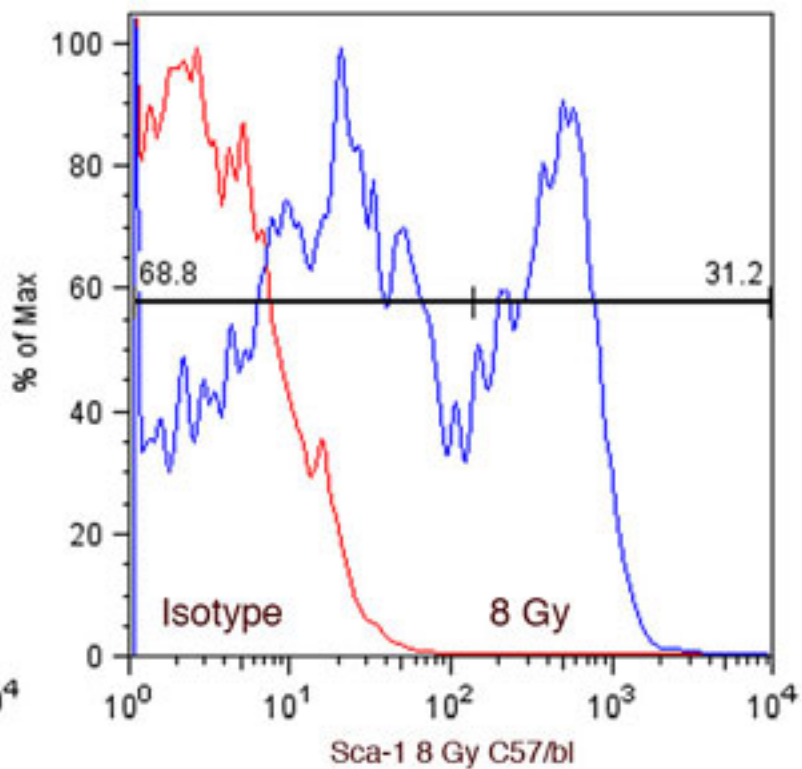
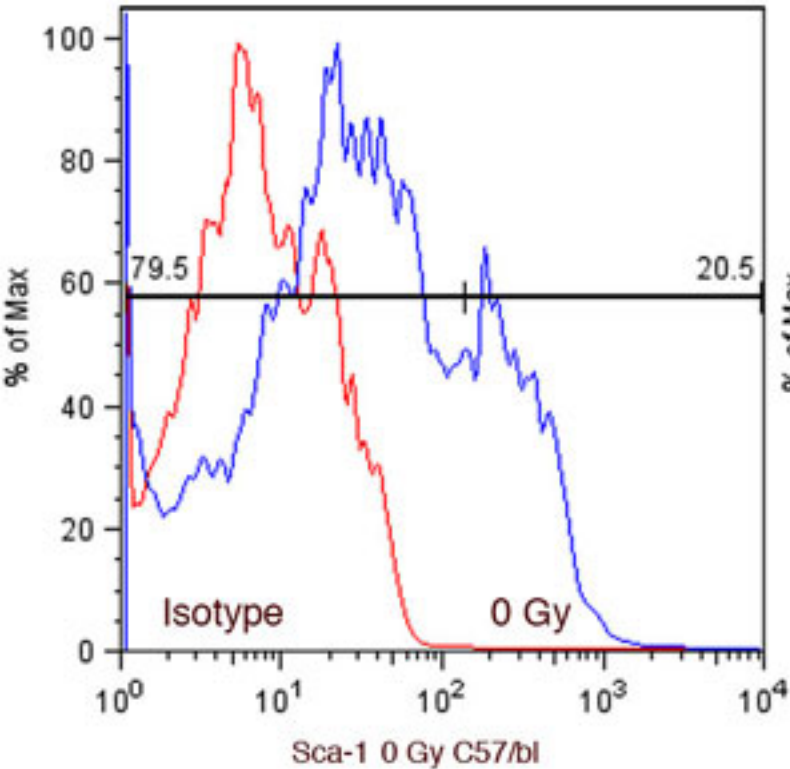
Clonogenic Assays. For clonogenic assays using sorted Sca1⁺ or Sca1⁻ cells, cultured BALB/c MECs were sham-irradiated or treated with 2 Gy \approx 1 h before trypsinization. Cells were trypsinized for 3 min, washed in HBSS⁺, and stained for 30 min with fluorescein isothiocyanate-conjugated anti-Sca1-antibody (BD Pharmingen). Cells were sorted using flow cytometry into 96-well round-bottom plates (Costar) containing 10 μ l of Matrigel (Discovery Labware, San Jose, CA) per well. Plates were prepared with Matrigel while on ice and kept on ice before sorting. After sorting, 50-100 μ l of growth medium was carefully added to each well. After 7-14 days, plates were fixed in glacial acetic acid and methanol (10 min, 1:2) and stained with crystal violet. Fixing and staining were performed carefully to not dislodge the Matrigel from the well. Two researchers independently counted colonies, and numbers were averaged.

Cell Cycle Analysis. The cell cycle analysis was performed according to the protocol described by Xin *et al.* [Xin L, Lawson DA, Witte ON (2005) *Proc Natl Acad Sci USA* 102:6942-6947]. In brief, cells were resuspended in 0.5 ml of NASS buffer (0.15 M NaCl; 5 mM sodium EDTA; 0.5% BSA fraction V; 0.1 M phosphate citrate buffer, pH 4.8) containing 0.02% saponin and 10 μ g/ml 7-aminoactinomycin D (7AAD) at ambient temperature for 20 min. Cells were washed with PBS and resuspended in NASS containing 0.02% saponin and 10 μ g/ml actinomycin D at 4°C for 5 min. We added 0.5 μ l of 1 μ g/ml pyronin Y diluted in distilled water and incubated samples at 4°C for 10 min before performing fluorescence-activated cell sorting analysis.





	0 Gy Sca ⁺	2 Gy Sca ⁺	4 Gy Sca ⁺	0 Gy Sca ⁻	2 Gy Sca ⁻	4 Gy Sca ⁻
G0	18	16.1	25.1	76.6	74.9	75.2
G1	69	67	54.6	10.2	12.2	14.7
S/G2/M	11.6	15.6	16.8	6.82	5.63	5.7

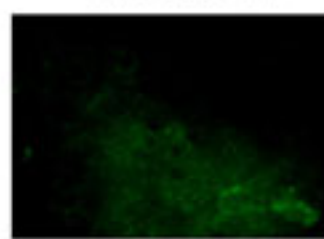
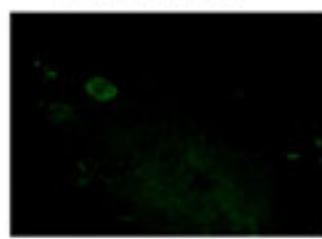
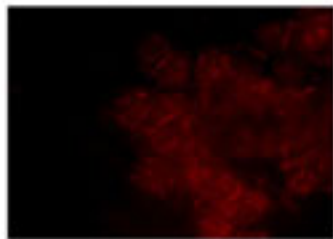
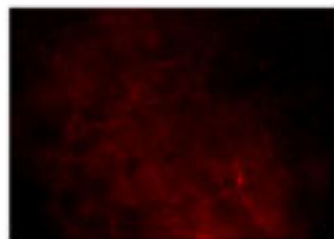
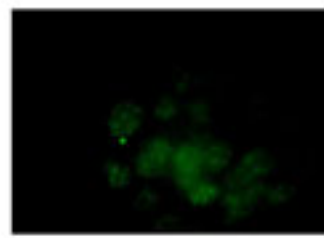
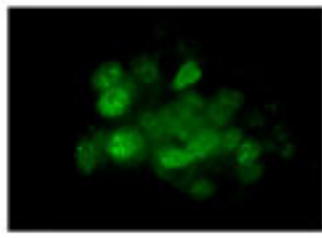
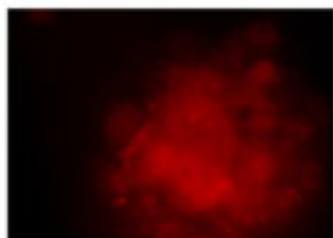
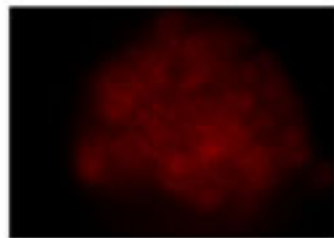
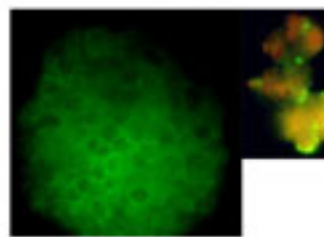
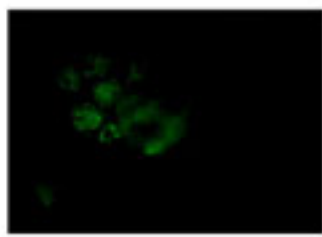
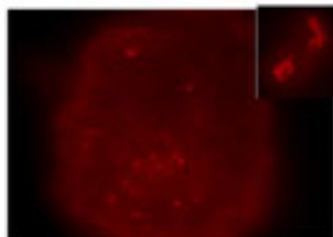
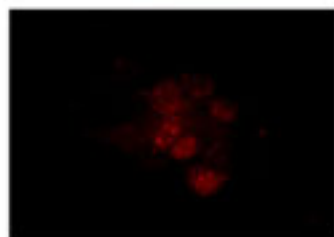


Lin-CD24-CD29-

Lin-CD24+CD29+

Lin-CD24-CD29-

Lin-CD24+CD29+

0H
0Gy0H
4Gy4H
4Gy24H
4Gy