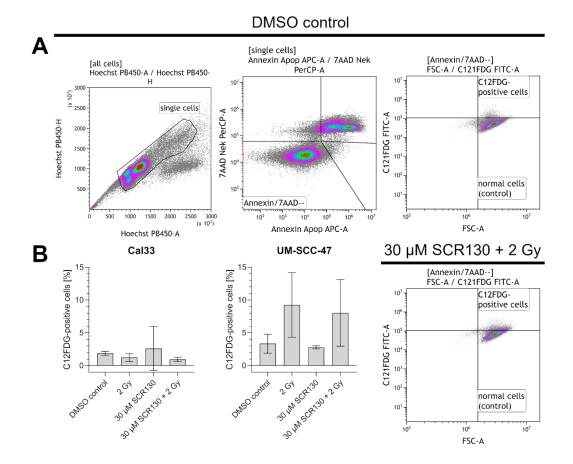
## **Supplementary Figure 1:**



## Measurement of C12FDG as a marker of senescent cells after treatment with SCR130 and IR. (A)

Gating strategy of C12FDG determination: Single cells were identified using Hoechst signal and living cells using Annexin V and 7AAD signal (Annexin/7AAD--). Only single living cells were analyzed regarding their C12FDG signal. The threshold for a positive C12FDG signal was defined with the DMSO control of every experiment and transferred to the other conditions. Exemplary, C12FDG signal for UM-SCC-47 in the DMSO control and after combined treatment are presented. (B) Cal33 and UM-SCC-47 were treated with 2 Gy IR, 30  $\mu$ M SCR130 or a corresponding volume of DMSO as vehicle control. For the combined treatment (30  $\mu$ M SCR130 + 2 Gy) IR was applied 3 h after SCR130 addition. C12FDG positivity was analyzed ten days after seeding. Each value represents mean  $\pm$  SD (n=4).