

Figure S1

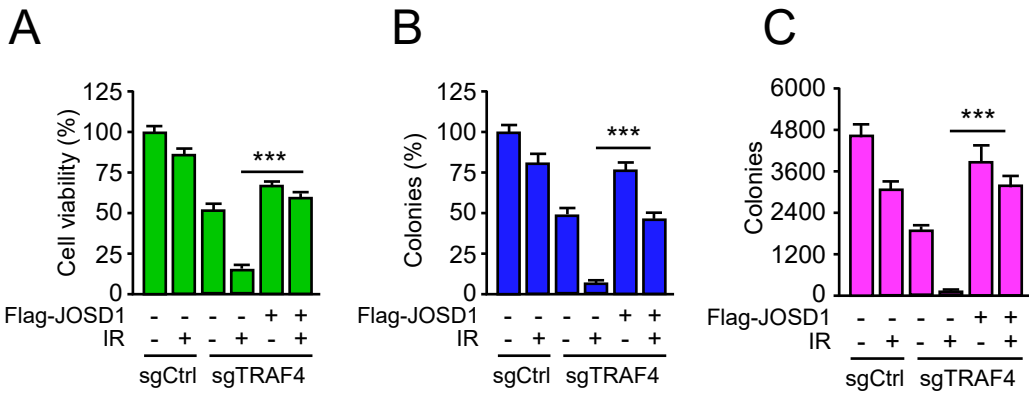
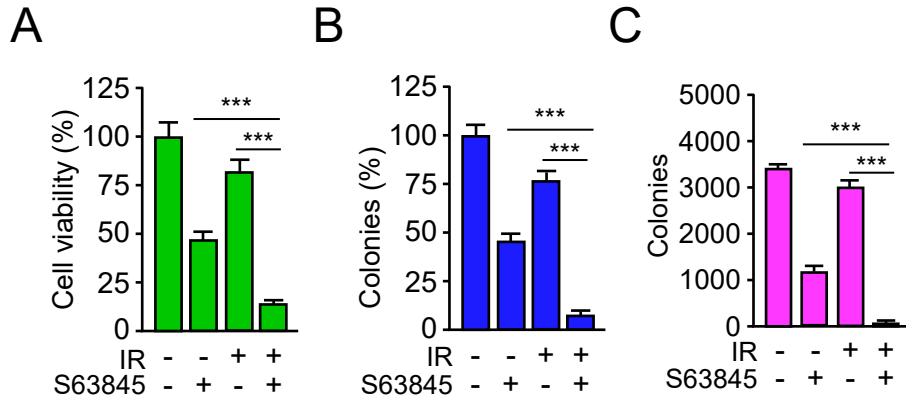


Figure S2



**Table 1: Quantification of TRAF4 and MCL-1 protein levels in normal and OSCC tissues**

| Characteristic | Tumor (n=81) | Adjacent (n=81) | <i>P</i> value  |
|----------------|--------------|-----------------|-----------------|
| TRAF4          |              |                 |                 |
| High           | 36           | 0               | <i>p</i> <0.001 |
| Low            | 45           | 81              |                 |
| MCL-1          |              |                 |                 |
| High           | 43           | 4               | <i>p</i> <0.001 |
| Low            | 38           | 77              |                 |

**Table 2: Quantification of TRAF4 and MCL-1 protein levels in primary (before) and relapsed (after) OSCC tissues**

| Characteristic | Before (n=20) | After (n=20) | <i>P</i> value |
|----------------|---------------|--------------|----------------|
| TRAF4          |               |              |                |
| High           | 6             | 16           | <i>p</i> <0.05 |
| Low            | 14            | 4            |                |
| MCL-1          |               |              |                |
| High           | 8             | 16           | <i>p</i> <0.01 |
| Low            | 12            | 4            |                |

### Supplementary Figure Legends

Supplementary Figure 1. A-C. Ectopic expression JOSD1 rescues tumorigenesis in TRAF4 knockout CAL27R cells under IR treatment. CAL27R cells were transfected with Flag-JOSD1 for 48 h, followed by IR (2 Gy) treated for 20 min. MTS assay was used to determine the cell viability (A), plate colony formation assay to analyze the colony formation (B) and soft agar assay to assess the anchorage-independent cell growth (C). \*\*\**p* <0.001.

Supplementary Figure 2. A-C. SCC25R cells were treated with S63845 inhibitor (2  $\mu$ M), IR (2 Gy) or a S63845/IR combination for 48 h. MTS assay was used to determine the cell viability (A), plate colony formation assay to analyze the colony formation (B) and soft agar assay to assess the anchorage-independent cell growth (C). \*\*\**p* <0.001.