

Figure S4. Examination of mouse and human IL-2  $T_E$  cells after enforcing mitochondrial fusion with drugs (Related to Figure 4).

(A-C) Flow cytometry analyses of IL-2  $T_E$  cells previously cultured with DMSO or M1+Mdivi-1 combined from 3 biological replicates. Cells were not subjected to further treatment with DMSO or M1+Mdivi-1 during experiment assays. (A) Cytolysis of EL4-OVA target cells at indicated concentrations. (B) Proliferation after restimulation with  $\alpha$ CD3/CD28. (C) Intracellular cytokine staining after 4 hours stimulation with PMA and ionomycin. Relative MFI (left) with mean  $\pm$  SEM and representative contour plots (right) with percentage of cytokine positive cells indicated in gated cells and MFI in bold, \*p<0.05. Gates based on unstimulated cells (not shown). (D) Human CD8+ PBMCs were activated with  $\alpha$ CD3/CD28 + IL-2 to generate IL-2  $T_E$  cells and subjected to DMSO or M1+Mdivi-1 treatment. KLRG1, CD127, CD45RA, and CD25 surface marker expression analyzed by flow cytometry shown with representative histograms from 4-6 biological replicates.