



Figure S6. T cell activation induces cristae remodeling that regulates metabolism (Related to Figure 6).

(A) Activated *Opa1*^{+/+} and *Opa1*^{-/-} IL-2 T_E cells were cultured overnight with D-Glucose-¹³C_{1,2} and traced for incorporation by mass spectrometry. Heat map representation of % labeled carbons in listed metabolites. (B) Splens from either polyclonal wild-type (+/+) or *Opa1* deficient T cell animals (-/- *Opa1* T) were isolated and surface marker expression assessed (CD44, CD62L on CD3⁺ CD8⁺ gates) by flow cytometry (top) or were further purified for CD8 T cells to assess OCR and ECAR at baseline (below) by Seahorse EFA. Data presented with mean ± SEM from n=6 per genotype, ***p<0.0001. (C) EM images of IL-15 T_M cell mitochondria over time before and after PMA and ionomycin stimulation from one experiment. Scale bar = 0.5 μm. (D) Immunoblot analysis of ETC complexes (CI-NDUFB8, CII-SDHB, CIII-UQCRC2, CIV-MTC01, CV-ATP5A) and OMM protein Tom20. Equivalent numbers of IL-2 T_E and IL-15 T_M cells lysed in native lysis buffer followed by digitonin solubilization of intracellular membranes. Pellet (P) and solubilized supernatant (S) fractions were resolved on a denaturing gel. Second experiment represented from **Figure 6J**.