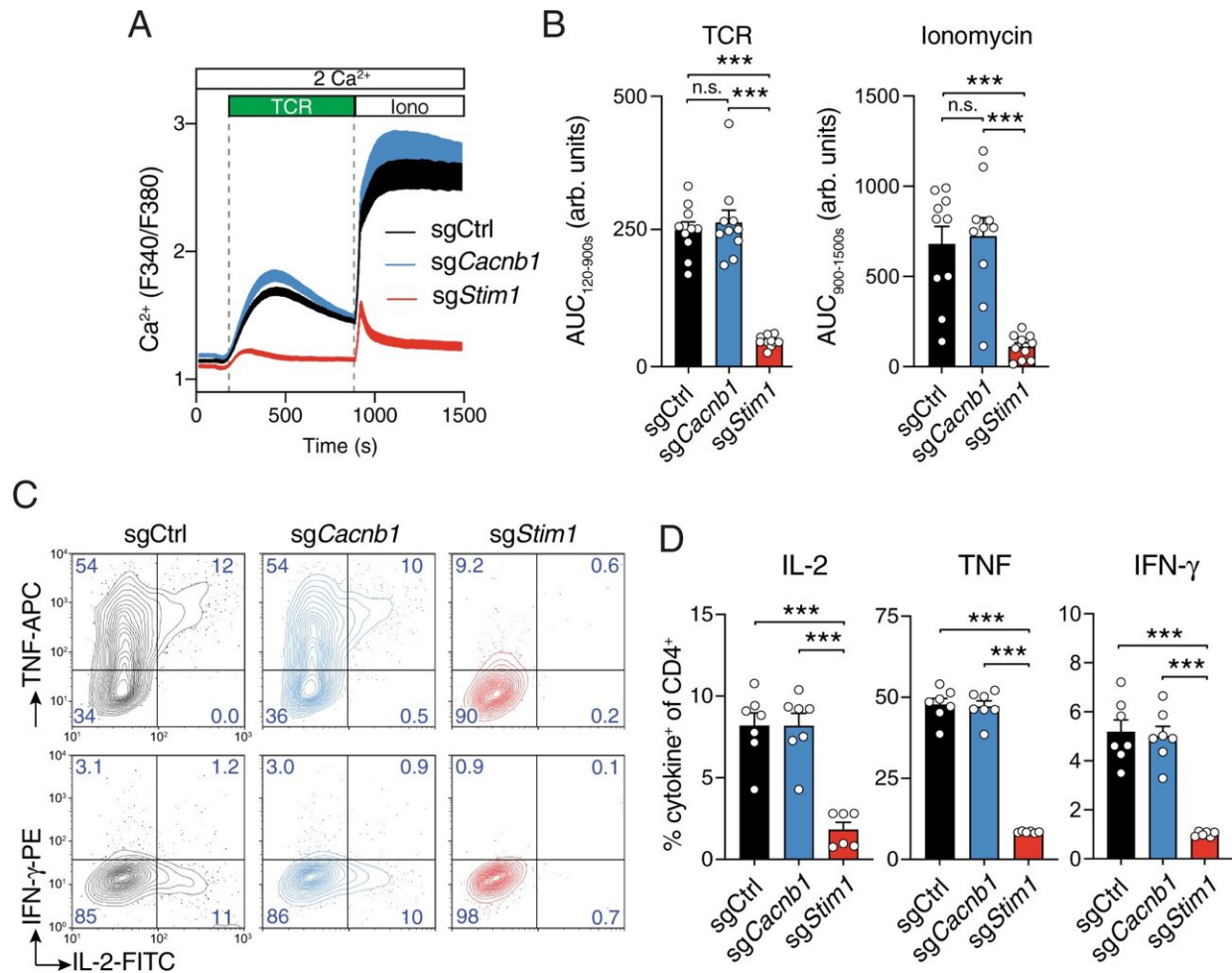


Expanded role for calcium channels in T-cells

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Cavβ1 is not required for Ca²⁺ influx and cytokine production by T cells. CD4⁺ T cells of LSL-Cas9; Cd4Cre mice were transduced with sgCtrl, sgCacnb1 or sgStim1. A, B After 3 days, Amt⁺ T cells were enriched by cell sorting, recovered for one day in medium containing IL-2 and IL-7 and analyzed. Cytosolic Ca²⁺ levels were measured following stimulation of T cells by anti-CD3 (TCR) cross-linking and ionomycin (Iono) in Ringer's solution containing 2 mM Ca²⁺. Averaged Ca²⁺ traces (A) and quantification (B) of the area under the

curve (AUC) in the time periods indicated by the dotted lines. C, D Cytokine production by CD⁴⁺ T cells was measured at day 4 after transduction and restimulation for 6 h with PMA and ionomycin. Representative contour plots (C) and quantification (D) of IL-2⁺, TNF⁺ and IFN- γ ⁺ CD4⁺ T cells. Data in (A, B, D) are the mean \pm SEM of n = 7 independent experiments performed in duplicates. Statistical analysis by two-tailed, unpaired Student's t test. ***p

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