

Supplemental FIGURE 1. Characterization of Itg and cytokine expression on T cell subsets from Itga, fl/fl CD4^{Cre} and wild type mice. (A, B) WT mice were immunized with Ten days later, draining LNs (dLN) were collected and single-cell MOG₃₅₋₅₅ in CFA. suspension prepared. Enriched CD4⁺ T cells were stimulated with PMA and ionomycin for 3 hours and stained for IFN_γ and IL17A by intracellular (A, left) or secretion assay (A, right). (B) Itgb₁ (left) and Itgb₇ expression (right) gated on Th1 (IFN γ^+ , blue line) and Th17 subsets (IL17A⁺, red line) stained by secretion assay. Filled histograms represent the isotype staining. Histograms are representative of three independent experiments. (C, E and F) Control and CD4^{Cre} Itga₄^{fl/fl} mice were immunized for EAE development with MOG₃₅₋₅₅/CFA. dLN and CNS were collected 8 and 20 days after immunization respectively. Itga₄ expression was evaluated on CD4⁺ (top) and CD8⁺ T cells (bottom) from control (blue line) and CD4^{Cre} Itga₄^{fl/fl} mice (red line) in dLN (left) and CNS (right). Overlays are representative of 4 different experiments. Note equivalent deletion of Itga, on CD4⁺ and CD8⁺ T cells isolated from LN and CNS. (D) CD4⁺ T cells from CD4^{Cre} Itga₄^{fl/fl}, Itga₄^{fl/fl} and WT mice were isolated by MACS positive purification (overall purity of CD4⁺ T cells: 90%) and stimulated with plate bound anti-CD3/CD28 antibodies (both at 1µg/ml) for 48 hours. Genomic DNA was isolated and deletion of Itga₄ at the genomic level was determined using previously described primers (Priestley GV. and al, Blood 2007, 109(1):109-11). Upper band detects Itga₄ deleted allele (Δ), middle band detects floxed allele (floxed) and lower band detects wild type allele (WT). (E) Itgb₁ (left) and Itgb₇ (right) expression gated on CD4⁺ T cells from control (blue line) and CD4^{Cre} Itga₄^{fl/fl} mice (red line). (F) Itga₄ expression was evaluated on Th1 cells (dark line) and Th17 cells (green line) from dLN of CD4^{Cre} Itga₄^{fl/fl} mice using secretion assay. (G) CD4^{Cre} Itga₄^{fl/fl} and Itga₄^{fl/fl} mice were immunized for EAE development with MOG₃₅₋₅₅ in CFA and pertussis toxin. Eight days later, CNS were collected and single cell suspensions prepared. Cells were stimulated with PMA/ionomycin and analyzed for cytokine secretion by intracellular cytokines staining. Percentages of IFNy and IL17A infiltrating CD4⁺ T cells recovered from the CNS of non sick mice were determined and used to calculate the ratio of Th1/Th17 cells in the CNS of CD4^{Cre} Itga₄^{fl/fl} (dark) and Itga₄^{fl/fl} mice (white)(*p<0.01). Data representative of 2 independent experiments with 6 mice per group.