



**Supplementary information, Figure S7.** Stat5<sup>+/+</sup> CD8<sup>+</sup> T cells fail to rescue the impaired encephalitogenicity of Stat5<sup>-/-</sup> CD4<sup>+</sup> T cells. LNs and splenocytes were obtained from MOG<sub>35-55</sub>/CFA-immunized Stat5<sup>+/+</sup> and Stat5<sup>-/-</sup> mice at day 10-14 and cultured with MOG<sub>35-55</sub> (20 μg/ml) in the presence of IL-23 and IL-1β for 3 days. CD4<sup>+</sup> and CD8<sup>+</sup> T cells were purified by positive selection and transferred into  $Rag2^{-/-}$  mice at different combination as indicated. (**A**) FACS plots showing the purity of CD4<sup>+</sup> and CD8<sup>+</sup> T cells before adoptive transfer. (**B**) Clinical scores of  $Rag2^{-/-}$  recipient mice (n=3 per group) after adoptive transfer of different combination of CD4<sup>+</sup> (1 million) and CD8<sup>+</sup> T cells (1 million). \*p<0.05.