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## **Supplemental information**

## Microbiota-mediated skewing of tryptophan

## catabolism modulates CD4<sup>+</sup> T cells

## in lupus-prone mice

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Α

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1616\_Fecal\_super

414\_Fecal\_supe Pool5p.mz XMLPeakheight 1717\_Fecal\_sup 1818\_Fecal\_sup 1919\_Fecal\_supe 2121\_Fecal\_sup

Pool6p.mz XMLPeakheigl

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r dues

2222\_Feca 2424\_Fecal\_supe I Pool8p 1313\_Fecal\_sup

323\_Fecal\_sup

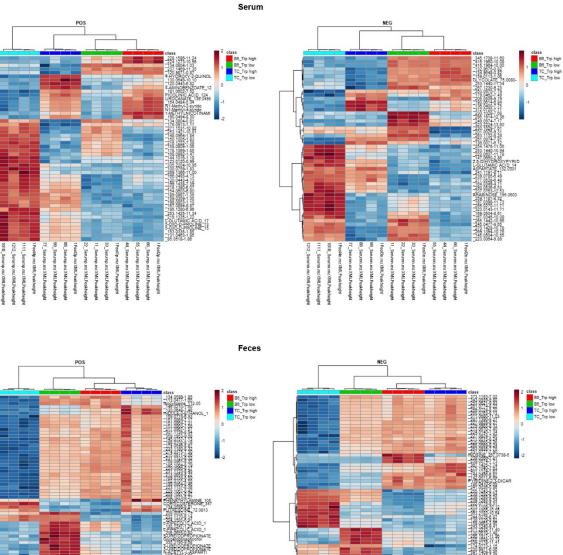


Figure S1. Heat maps of the top 50 metabolites as determined from ANOVA from serum) and feces from B6 and TC mice fed high or low tryptophan for 1 month. Related to Figure 1.

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222 Feca 323\_recal\_supe 313\_Fecal 515 Fecal 414\_Fecal\_supe 616\_Fecal\_supern 818\_Fecal\_sup 717\_Fecal\_supern

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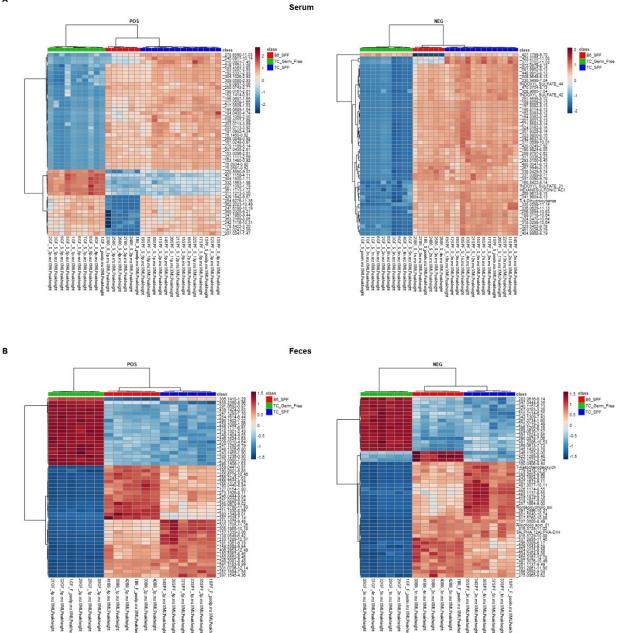
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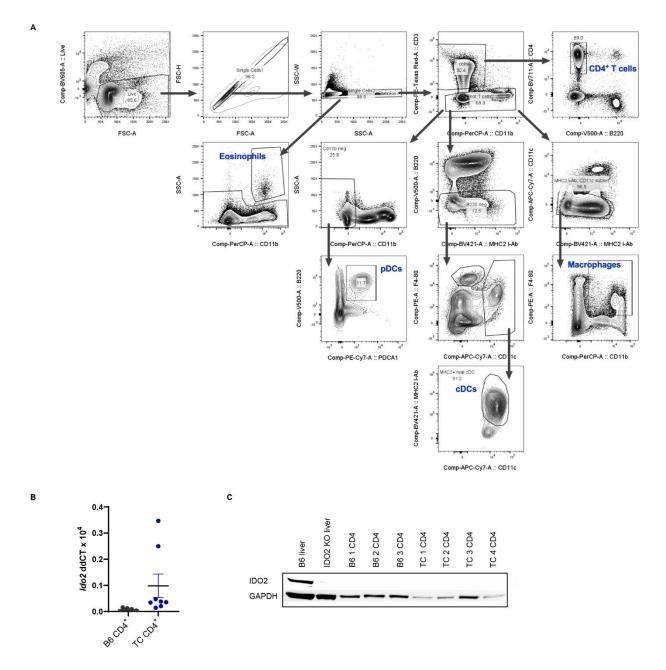
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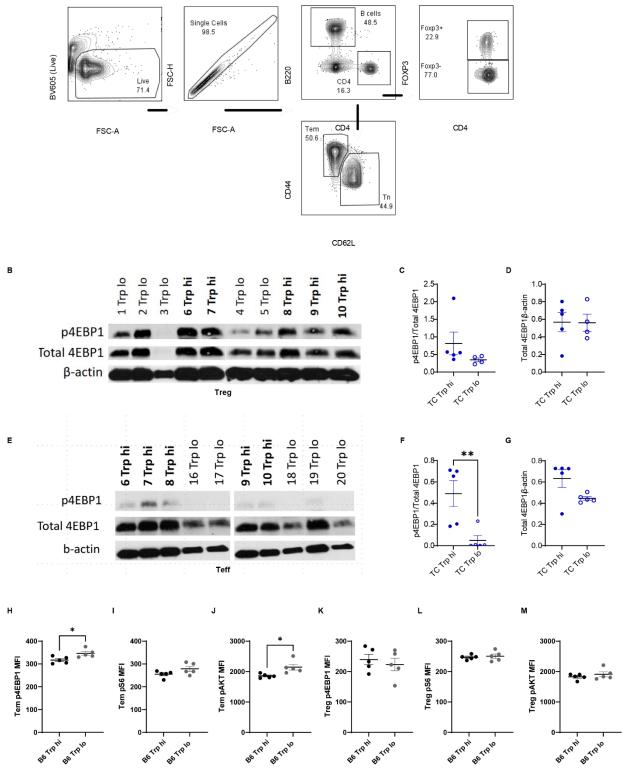
10101



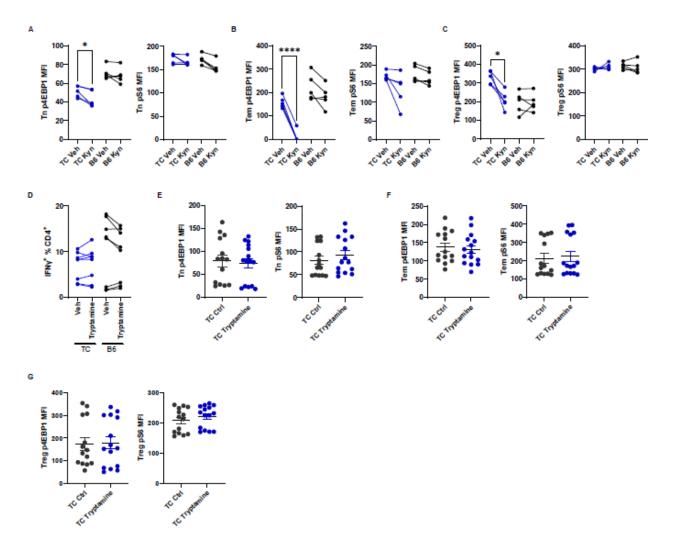
**Figure S2.** Heat maps of the top 50 metabolites as determined from ANOVA from serum and fecal metabolite profiles in GF TC, SPF TC, and SPF B6 mice. Related to Figure 3.



**Figure S3. A.** Gating strategy for splenocytes populations and *Ido2* gene expression. Related to Figure 4.



**Figure S4.** Gating strategy for Treg, Tn and Tem cells and expression of targets of mTOR signaling. Related to Figure 6.



**Figure S5.** Effect of kynurenine and tryptamine on TC and B6 T cell phenotypes. Related to Figure 7.

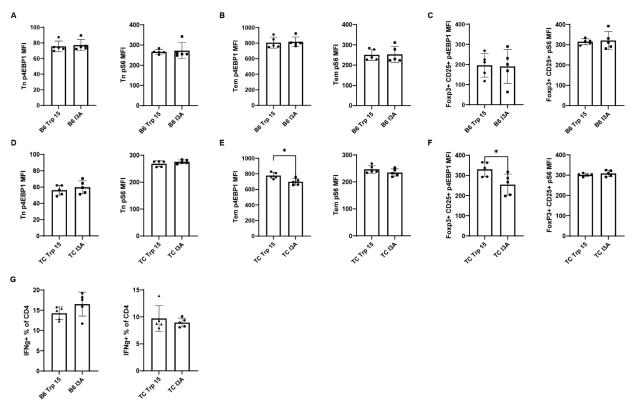


Figure S6. Effect of I3A on TC and B6 T cell phenotypes. Related to Figure 7.