

# Supplementary Material

## Loss of interleukin-1 beta is not protective in the lupus-prone NZM2328 mouse model

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### **1** Supplementary Figures and Tables

### 1.1 Supplementary Figures

Supplementary Figure 1

Supplementary Figure 2

Supplementary Figure 3

### **1.2** Supplementary Tables

Supplementary Table 1

Supplementary Table 2





Supplementary Figure 1. Representative images of kidneys stained with (A) CD4, (B) CD8, and (C) CD11c.



**Supplementary Figure 2.** Pathway analysis of differentially expressed genes between NZM and NZM-*Il1b*<sup>-/-</sup> kidneys highlighted the TNF (p=7.59x10<sup>-5</sup>) and IL-17 signaling (p=1.21x10<sup>-6</sup>) pathways among the top regulated pathways.



**Supplementary Figure 3.** RNA-sequencing gene expression analysis of (**A**) IL-17 and (**B**) TNF pathway scores in the glomerular compartment of human lupus nephritis (LN) and healthy living donor (LD) biopsies: IL-17 and TNF signaling pathway scores were significantly higher in female LN (n=10) compared to LD controls (n=4) (p=0.0296 and 0.0076 respectively), but not in males (n=1 LD and 3 LN) (p=0.6111 and 0.3357 respectively). Microarray gene expression analysis of (**C**) IL-17 and (**D**) TNF pathway scores in the tubulointerstitial compartment of human LN and LD biopsies: IL-17 and TNF signaling pathway scores were not significantly different in female LN (n=19) compared to LD controls (n=6) (0.8085 and 0.9338, respectively) or in males (n=4 LD and n=3 LN) (p=0.3565 and 0.2995, respectively). RNA-sequencing gene expression analysis of (**E**) IL-17 and (**F**) TNF pathway scores in the tubulointerstitial compartment of human LN and LD biopsies: IL-17 and TNF signaling pathway scores in the tubulointerstitial compartment of human LN and LD biopsies: IL-17 and (**F**) TNF pathway scores were not significantly different in female LN (n=18) compared to LD controls (n=4) (p=0.1415 and 0.1548, respectively) or in males (n=1 LD and 6 LN) (p=0.4028 and 0.3344, respectively).