

SUPPLEMENTARY MATERIALS

Identification of functional enhancer variants associated with type I diabetes in CD4+ T cells

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Supplementary Figure 1. Upstream and downstream targets of enhancer variants.

Supplementary Figure 2. CRISPRi validation of enhancer-target gene interactions for *DEXI*.

Supplementary Table 1. Enhancer SNP MPRA.

Supplementary Table 2. Predicted allelic TF binding to validated enhancer variants.

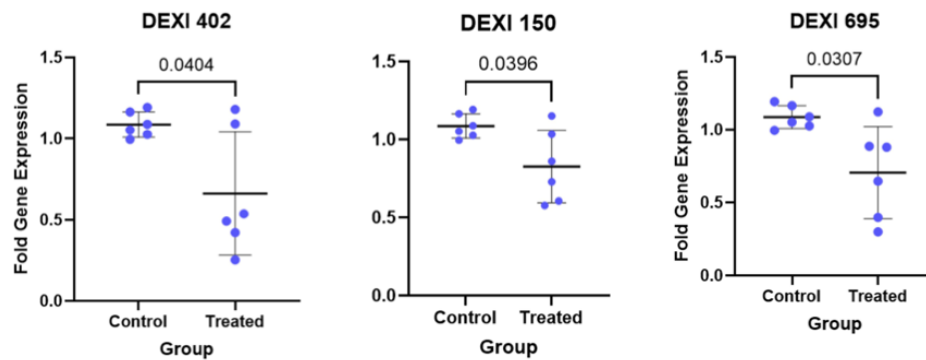
Supplementary Table 3. CRISPRi guide RNAs and Taqman probes.

Supplementary Figure 1



Supplementary Figure 1. Upstream and downstream targets of enhancer variants. **A.** KEGG pathways associated with T1D enhancer variant TFs. **B.** Promoter capture Hi-C enhancer target genes in the *CLEC16A* locus. Browser shot of *CLEC16A-RMI2* locus showing enhancer variants (yellow lines), H3K4me1 ChIP-seq data from activated CD4+ T cells (red) and activated CD4+ T cell pHi-C data with enhancer variant interactions to target genes in blue (*SOCS1* gene) and dark gray (*RMI2* gene).

Supplementary Figure 2



Supplementary Figure 2. CRISPRi validation of enhancer-target gene interactions for *DEXI* gene and enhancers harboring known eQTL variants rs12599402 (“402”), rs7203150 (“150”) and rs9746695 (“695”). Enhancer target gene expression level after enhancer (treated) repression by CRISPRi or using non-targeting control guide (Control). P values are indicated above the line in each comparison.