

SUPPLEMENTARY DATA

**Supplementary Table 1.** Distribution of DRB3\*02:02 and \*01:01 alleles on extended DRB1\*03:01 haplotypes among three groups (AFBAC, DR3/4, and DR3/3) Legend. The distribution of DRB3 \*01:01 and \*02:02 alleles on various extended DRB1\*03:01 haplotypes is shown in DR3/DR3 and DR3/DR4 genotypes as well as on AFBAC (control) DRB1\*03:01 haplotypes. The HLA-A,- C, -B, and DPB1 alleles that define the extended haplotypes were chosen on the basis of reported T1D associations. DRB1\*03:01 haplotypes bearing the DPB1\*01:01 allele, the B\*08:01 allele, C\*07:01, or the A\*01:01 allele are in very strong LD with DRB3:01:01 and so are not informative in the comparison of the distribution of the DRB3 alleles between these three groups. Similarly, DRB1\*03:01 haplotypes bearing DPB1\*02:02, B\*18:01, or the A\*30:02 allele are in very strong LD with DRB3:02:02 and, thus, are also not informative. The number of DRB1\*03:01 haplotypes bearing A\*24:02 and DPB1\*04:02 is small but the number of of DRB1\*03:01 haplotypes bearing DPB1\*03:01 allows a comparison of the distribution of DRB3 alleles among the three groups (Table 4).

	<b>DRB3*02:02</b>			<b>DRB3:01:01</b>		
	<b>AFBAC</b>	<b>DR3/4</b>	<b>DR3/3</b>	<b>AFBAC</b>	<b>DR3/4</b>	<b>DR3/3</b>
<b>DPB1*0101</b>	0	3	0	26	42	6
	0.00%	6.70%	0.00%	100%	93.30%	100%
<b>DPB1*0202</b>	2	18	5	0	0	0
	100%	100%	100%	0.00%	0.00%	0.00%
<b>DPB1*0301</b>	1	7	8	3	31	3
	25.00%	18.40%	72.70%	75.00%	81.60%	27.30%
<b>DPB1*0402</b>	1	1	1	6	3	1
	14.30%	25.00%	50.00%	85.70%	75.00%	50.00%
<b>Cw *07:01</b>	2	5	2	54	117	23
	3.60%	4.10%	8.00%	96.40%	95.90%	92.00%
<b>B*08:01</b>	2	6	1	57	118	24
	3.40%	4.80%	4.00%	96.60%	95.20%	96.00%
<b>B*18:01</b>	6	35	13	1	1	0
	85.70%	97.20%	100%	14.30%	2.80%	0.00%
<b>A*01:01</b>	1	5	1	43	80	17
	2.30%	5.90%	5.60%	97.70%	94.10%	94.40%
<b>A*24:02</b>	2	5	1	4	10	3
	33.30%	33.30%	25.00%	66.70%	66.70%	75.00%
<b>A*30:02</b>	3	10	7	0	0	0
	100%	100%	100.0%	0.00%	0.00%	0.00%

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**Supplementary Figure 1.** Structural model of the peptide binding groove of the DRB3\*02:02 molecule. Polymorphic amino acids encoded by DRB3\*02:02 but not by DRB3\*01:01 are shown.

