

**Supplemental Data**

***HLA-DRB1\*0401* and *HLA-DRB1\*0408* Are Strongly  
Associated with the Development of Antibodies  
against Interferon- $\beta$  Therapy in Multiple Sclerosis**

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Specificity		anti-IFN- $\beta$ assay					
HLA	N	mean	median	sdev	p	FDR	
A	1	84	38	21.6	37.9	0.62	0.92
	2	117	39.6	25.9	37.4	0.95	0.95
	3	92	40.5	26.7	38.6	0.71	0.92
	11	31	47	38.6	38.5	0.15	0.68
	23	11	30.1	9.9	39.4	0.34	0.72
	24	50	39	23	39.5	0.79	0.92
	25	17	40.4	29.9	39	0.9	0.95
	26	18	35.5	27.3	32.5	0.69	0.92
	29	15	31.4	5.2	41.5	0.16	0.68
	30	9	33.8	16	38	0.78	0.92
	31	9	38.2	16	41.5	0.81	0.92
	32	21	45.9	38.6	39.5	0.45	0.85
	33	4	57.9	58.2	39.7	0.24	0.68
	66	5	13.4	7.7	10.8	0.32	0.72
	68	17	55.2	67.4	35.4	0.062	0.68
	B	7	108	44.1	41.4	38.1	0.11
8		55	36.1	18	38.3	0.36	0.63
13		14	21.1	7	34.8	0.07	0.34
14		8	58.1	52.8	28	0.12	0.34
15		43	37.8	20	38.8	0.34	0.63
18		28	27.8	13.7	34.4	0.14	0.34
27		24	54.8	58.7	44.9	0.06	0.34
35		45	38.9	33	38.5	0.75	0.83

37	13	37.1	43.4	32	0.8	0.83	
38	4	24.2	17	29.9	0.39	0.63	
39	15	55.2	59.8	41.8	0.13	0.34	
40	28	35.1	23.9	34.4	0.5	0.63	
41	7	20.9	16	20.2	0.5	0.63	
44	39	37.6	21.7	38.2	0.49	0.63	
45	2	39.4	39.4	6.1	0.8	0.83	
49	8	28.7	9.7	39.8	0.38	0.63	
50	5	11.2	7.2	14.4	0.14	0.34	
51	38	43.6	33.4	39.4	0.42	0.63	
52	3	55.1	58.9	50	0.45	0.63	
55	4	39.5	32.6	38	0.86	0.86	
56	4	17.8	14.6	10.5	0.62	0.74	
57	<b>10</b>	<b>67.2</b>	<b>77.6</b>	<b>41</b>	<b>0.03</b>	<b>0.34</b>	
C	1	10	24.2	11.2	31.1	0.29	0.54
	2	<b>29</b>	<b>53.8</b>	<b>47.2</b>	<b>42.3</b>	<b>0.03</b>	<b>0.19</b>
	3	56	38.4	23.4	37.5	0.56	0.73
	4	57	36.2	19.1	37.1	0.34	0.55
	5	18	25.3	16.1	28.9	0.16	0.42
	6	45	37.9	35.1	36.9	0.81	0.94
	7	168	42.3	34.9	38.5	0.26	0.54
	8	8	58.1	52.8	28	0.12	0.42
	12	31	42.5	28.3	40	0.49	0.71
	14	5	60.6	47.8	24.5	0.16	0.42
	15	24	40	18.9	39	0.87	0.94
	16	<b>16</b>	<b>21.1</b>	<b>3</b>	<b>40</b>	<b>0.01</b>	<b>0.1</b>
	17	9	32.7	17.4	31.9	0.97	0.97

**Table S1.** Analysis of anti-IFN $\beta$  for MHCI specificity. While significant differences (highlighted) can be seen in single tests for *HLA-C\*16*, *HLA-C\*2* and *HLA-B\*57*, significance vanishes after FDR correction.