

**Supplementary Table S5.** Haplotype analysis of the interaction regions located in the MHC region

Haplotype	Haplotype frequency <sup>a</sup>						Global association p-value		
	Pooled	Control	Case	OR (95% c.i.) <sup>a</sup>	Stage 1	Stage 2	Combined		
<b>Zone I</b>									
rs2523864 rs2523849 rs9380215 rs4947296 rs2233984									
A A G A G	0.02	0.02	0.01	0.69 (0.32,1.45)					
A G A G A	0.06	0.08	0.04	0.56 (0.34,0.93)					
A G G A G	0.22	0.18	0.26	1.95 (1.49,2.54)					
G A A G A	0.20	0.14	0.25	2.34 (2.34,3.09)					
G A G A G	0.49	0.56	0.43	1.00					
Rare	0.01	0.01	0.01	0.55 (0.12,2.48)					
Global association p-value					1.03E-06	5.81E-04	8.35E-10		
<b>Zone 2</b>									
rs879882 rs7761965 rs2596501 rs7770216									
A A A A	0.04	0.05	0.03	0.39 (0.21,0.73)					
A A A C	0.04	0.05	0.03	0.45 (0.24,0.82)					
A G A A	0.03	0.04	0.03	0.77 (0.39,1.53)					
A G G A	0.07	0.08	0.06	0.53 (0.33,0.86)					
A G G C	0.17	0.16	0.18	0.80 (0.56,1.14)					
G A A A	0.02	0.02	0.02	0.70 (0.27,1.80)					
G A A C	0.06	0.08	0.04	0.43 (0.25,0.73)					
G A G A	0.17	0.13	0.21	1.18 (0.84,1.65)					
G A G C	0.03	0.02	0.03	0.94 (0.43,2.07)					
G G A C	0.02	0.02	0.01	0.38 (0.11,1.33)					
G G G A	0.03	0.03	0.03	0.59 (0.30,1.16)					
G G G C	0.10	0.14	0.07	0.39 (0.25,0.61)					
A G A C	0.20	0.16	0.23	1.00					
Rare	0.01	0.01	0.01	0.70 (0.22,2.22)					
Global association p-value					1.40E-04	5.77E-02	2.00E-06		

<sup>a</sup>Calculated using Combined dataset.