

Supplementary Table 1. Gene frequencies (%) of the two and four-digit HLA-A and -C alleles detected in EBV-IgA/VCA positive controls (N = 287) and EBV-IgA/VCA negative controls (N = 342)

HLA-A	Frequency		P value*	HLA-C	Frequency		P value*
	EBV-IgA positive	EBV-IgA negative			EBV-IgA positive	EBV-IgA negative	
01	0.52	0.44	ns	01	22.3	17.84	ns
0101	0.35	0.44	ns	0102	21.95	17.54	ns
0103	0.17	0.0	ns	0103	0.35	0.29	ns
02	31.53	33.77	ns	0202	0.17	0.15	ns
0201	4.53	3.22	ns	03	31.71	34.94	ns
0203	13.76	16.52	ns	0302	12.20	14.47	ns
0206	2.09	2.49	ns	0303	2.61	3.65	ns
0207	11.15	11.40	ns	0304	16.90	16.81	ns
0211	0.00	0.15	ns	0317	0.0	0.0	ns
03	1.05	1.32	ns	04	4.88	4.24	ns
0301	1.05	1.17	ns	0401	2.61	2.05	ns
0302	0.0	0.15	ns	0403	2.26	2.19	ns
11	32.40	32.31	ns	0501	0.0	0.15	ns
1101	28.57	29.53	ns	0602	1.57	1.90	ns
1102	3.83	2.78	ns	07	17.77	20.47	ns
2301	0.17	0.15	ns	0701	0.52	0.88	ns
24	15.16	12.72	ns	0702	17.25	19.15	ns
2402	14.63	12.43	ns	0704	0.0	0.44	ns
2403	0.35	0.15	ns	0801	9.93	9.06	ns
2405	0.0	0.0	ns	12	5.40	3.36	ns
2407	0.17	0.0	ns	1202	2.96	1.61	ns
2410	0.0	0.15	ns	1203	2.44	1.75	ns
2501	0.0	0.0	ns	14	3.48	5.41	ns
2601	1.05	1.32	ns	1402	3.48	5.26	ns
29	0.87	0.58	ns	1403	0.0	0.15	ns
2901	0.70	0.44	ns	15	2.79	2.49	ns
2902	0.17	0.15	ns	1502	2.09	1.90	ns
30	0.87	1.32	ns	1504	0.0	0.0	ns
3001	0.87	1.17	ns	1505	0.70	0.44	ns
3002	0.0	0.15	ns	1517	0.0	0.15	ns
3101	0.52	0.73	ns	1602	0.0	0.0	ns
32	0.17	0.0	ns				
3201	0.0	0.0	ns				
3203	0.17	0.0	ns				
3303	14.63	14.04	ns				
3401	0.0	0.0	ns				
6801	0.17	0.0	ns				
7400	0.87	1.32	ns				

* “ns” = P > 0.05

Supplementary Table 2. Gene frequencies (%) of the two and four-digit HLA-B alleles detected in EBV-IgA/VCA positive controls (N = 287) and EBV-IgA/VCA negative controls (N = 342)

HLA-B	Frequency		P value*	HLA-B	Frequency		P value*
	EBV-IgA positive	EBV-IgA negative			EBV-IgA positive	EBV-IgA negative	
07	0.87	1.17	ns	40	13.41	11.4	ns
0702	0.17	0.58	ns	4001	12.02	10.23	ns
0705	0.70	0.58	ns	4002	1.22	1.02	ns
0801	0.17	0.44	ns	4006	0.17	0.15	ns
13	13.76	12.43	ns	44	0.35	0.73	ns
1301	12.89	11.40	ns	4402	0.00	0.15	ns
1302	0.87	1.02	ns	4403	0.35	0.58	ns
15	11.32	11.70	ns	4501	0.17	0.00	ns
1501	2.09	1.02	ns	4601	17.25	14.04	ns
1502	8.36	8.48	ns	48	1.74	0.73	ns
1503	0.00	0.00	ns	4801	0.70	0.29	ns
1510	0.00	0.15	ns	4803	1.05	0.44	ns
1511	0.00	0.73	ns	4901	0.00	0.15	ns
1512	0.17	0.44	ns	5001	0.00	0.15	ns
1518	0.00	0.15	ns	51	5.23	5.85	ns
1525	0.35	0.73	ns	5101	4.36	5.26	ns
1527	0.35	0.00	ns	5102	0.87	0.58	ns
18	0.00	0.58	ns	5106	0.00	0.00	ns
1801	0.00	0.44	ns	5201	0.35	0.29	ns
1802	0.00	0.15	ns	5401	2.79	2.05	ns
27	1.92	1.32	ns	55	4.36	4.09	ns
2704	1.39	1.17	ns	5501	0.35	0.15	ns
2705	0.17	0.00	ns	5502	3.83	3.51	ns
2706	0.35	0.15	ns	5503	0.17	0.00	ns
35	1.74	1.75	ns	5507	0.00	0.44	ns
3501	0.87	0.44	ns	56	1.74	2.63	ns
3503	0.00	0.29	ns	5601	1.05	2.19	ns
3505	0.87	1.02	ns	5604	0.70	0.44	ns
3530	0.00	0.00	ns	5701	0.17	0.15	ns
3701	0.17	0.73	ns	5801	13.07	14.91	ns
38	8.54	10.82	ns	6701	0.17	0.29	ns
3801	0.35	0.58	ns				
3802	8.19	10.23	ns				
39	0.70	1.61	ns				
3901	0.52	1.32	ns				
3905	0.00	0.15	ns				
3909	0.00	0.15	ns				
3915	0.17	0.00	ns				

* “ns” = P > 0.05

Supplementary Table 3. Gene frequencies (%) of the two and four-digit HLA-A and -C alleles detected in NPC patients (N = 356) and controls (N = 629)

HLA-A	Frequency			HLA-Cw	Frequency		
	NPC patients	Controls	P value*		NPC patients	Controls	P value*
01	0.42	0.48	ns	01	19.38	19.87	ns
0101	0.42	0.40	ns	0102	18.96	19.55	ns
0103	0.0	0.08	ns	0103	0.42	0.32	ns
02	38.62	32.75	0.01	0202	0.0	0.16	ns
0201	3.09	3.82	ns	03	35.39	33.47	ns
0203	15.45	15.26	ns	0302	18.12	13.43	0.005
0206	5.2	2.31	0.0006	0303	1.83	3.18	ns
0207	14.89	11.29	0.02	0304	15.31	16.85	ns
0211	0.0	0.08	ns	0317	0.14	0.0	ns
03	0.7	1.19	ns	04	3.51	4.53	ns
0301	0.7	1.11	ns	0401	2.53	2.31	ns
0302	0.0	0.08	ns	0403	0.98	2.23	0.05
11	23.74	32.35	0.0001	0501	0.0	0.08	ns
1101	19.52	29.09	<0.0001	0602	0.84	1.75	ns
1102	4.21	3.26	ns	07	22.19	19.24	ns
2301	0.28	0.16	ns	0701	0.28	0.72	ns
24	12.92	13.83	ns	0702	21.49	18.28	ns
2402	12.36	13.43	ns	0704	0.42	0.24	ns
2403	0.0	0.24	ns	0801	11.24	9.46	ns
2405	0.14	0.0	ns	12	1.12	4.29	0.0001
2407	0.28	0.08	ns	1202	0.56	2.23	0.005
2410	0.14	0.08	ns	1203	0.56	2.07	0.01
2501	0.14	0.0	ns	14	4.92	4.53	ns
2601	1.54	1.19	ns	1402	4.92	4.45	ns
29	0.0	0.72	ns	1403	0.0	0.08	ns
2901	0.0	0.56	ns	15	1.12	2.62	0.03
2902	0.0	0.16	ns	1502	0.98	1.99	ns
30	0.56	1.11	ns	1504	0.14	0.0	ns
3001	0.56	1.03	ns	1505	0.0	0.56	ns
3002	0.0	0.12	ns	1517	0.0	0.08	ns
3101	0.14	0.64	ns	1602	0.28	0.0	ns
32	0.14	0.08	ns				
3201	0.14	0.0	ns				
3203	0.0	0.08	ns				
3303	20.51	14.31	0.0004				
3401	0.14	0.0	ns				
6801	0.0	0.08	ns				
7400	0.14	1.11	0.02				

* “ns” = P > 0.05

Supplementary Table 4. Gene frequencies of two and four-digit HLA-B alleles detected in NPC patients (N = 356) and controls (N = 629)

HLA-B	Frequency			HLA-B	Frequency		
	NPC patients	Controls	P value*		NPC patients	Controls	P value*
07	0.0	1.03	0.01	40	16.29	12.32	0.01
0702	0.0	0.40	ns	4001	14.75	11.05	0.02
0705	0.0	0.64	ns	4002	0.98	1.11	ns
0801	0.14	0.32	ns	4006	0.56	0.16	ns
13	8.43	13.04	0.002	44	0.28	0.56	ns
1301	7.72	12.08	0.002	4402	0.0	0.08	ns
1302	0.70	0.95	ns	4403	0.28	0.48	ns
15	10.67	11.53	ns	4501	0.0	0.08	ns
1501	0.84	1.51	ns	4601	17.13	15.50	ns
1502	8.71	8.43	ns	48	1.69	1.19	ns
1503	0.14	0.0	ns	4801	0.84	0.48	ns
1510	0.0	0.08	ns	4803	0.84	0.72	ns
1511	0.42	0.40	ns	4901	0.0	0.08	ns
1512	0.14	0.32	ns	5001	0.0	0.08	ns
1518	0.0	0.08	ns	51	5.34	5.56	ns
1525	0.42	0.56	ns	5101	4.78	4.85	ns
1527	0.0	0.16	ns	5102	0.42	0.72	ns
18	0.42	0.32	ns	5106	0.14	0.0	ns
1801	0.28	0.24	ns	5201	0.14	0.32	ns
1802	0.14	0.08	ns	5401	2.39	2.38	ns
27	0.0	1.59	0.001	55	0.56	4.21	<0.0001
2704	0.0	1.27	0.005	5501	0.0	0.24	ns
2705	0.0	0.08	ns	5502	0.56	3.66	<0.0001
2706	0.0	0.24	ns	5503	0.0	0.08	ns
35	2.53	1.75	ns	5507	0.0	0.24	ns
3501	1.26	0.64	ns	56	0.84	2.23	0.02
3503	0.28	0.16	ns	5601	0.28	1.67	0.006
3505	0.84	0.95	ns	5604	0.56	0.56	ns
3530	0.14	0.0	ns	5701	0.0	0.16	ns
3701	0.14	0.48	ns	5801	19.10	14.07	0.003
38	12.78	9.78	0.04	6701	0.84	0.24	ns
3801	0.14	0.48	ns				
3802	12.64	9.30	0.02				
39	0.28	1.19	0.04				
3901	0.28	0.95	ns				
3905	0.0	0.08	ns				
3909	0.0	0.08	ns				
3915	0.0	0.08	ns				

* “ns” = P >0.05

Supplementary Table 5. Frequencies (%) of genotypes of HLA-A and -B showing a significant association with NPC risk between patients (N = 356) and controls (N = 629)

Allele	Frequencies (%)		OR	P value
	NPC patients	Controls		
HLA-A				
02,33	16.57	9.857	1.82	0.002
11,11	3.652	9.38	0.37	0.0009
HLA-B				
40,58	8.99	3.66	2.6	0.0005
38,58	5.9	3.02	2.01	0.03
40,46	5.9	2.86	2.13	0.02
38,40	3.65	1.59	2.35	0.04
51,58	2.53	0.79	3.24	0.03
HLA-A,-B				
11,11-13,40	0	1.43	0.1	0.05
02,33-38,58	4.21	1.59	2.72	0.01
02,33-40,58	3.37	0.79	4.35	0.003
02,11-38,46	1.12	0.16	7.14	0.04
11,33-38,58	1.12	0.16	7.14	0.04
02,02-38,40	1.4	0	17.92	0.007

Supplementary Table 6. Odds Ratios of HLA genotypes for NPC development between patients (N = 356) and controls (N = 629/

HLA genotype*	Frequency		OR (95% CI)	P value†
	NPC patients	Controls		
P/P	3.09	12.72	0.22(0.12-0.40)	<0.0001
P/N	15.73	25.12	0.56(0.40-0.78)	0.0006
N/N	8.15	12.08	0.65(0.41-1.01)	ns
P/S	16.01	20.99	0.72(0.51-1.01)	ns
N/S	33.99	19.71	2.10(1.57-2.81)	<0.0001
S/S	23.08	9.38	2.89(2.03-4.12)	<0.0001

* "P" = protective haplotype; "S" = susceptible haplotype; "N" = neutral haplotype.

† "ns" = P > 0.05