

Supplemental data

Table S1. PRIMO, HIC and ALT main characteristics

	PRIMO N=747	HIC N=45	ALT N=66
Age at inclusion, years (med[range])	35 [15-79]	47[31-78]	37 [22-65]
Men : N (%)	653 (87%)	28 (62%)	51 (77%)
Transmission			
Sexual			
-Men from men	556 (75%)	8 (19%)	34 (52%)
-Men from woman	63 (8%)	4 (9%)	2 (3%)
-Women from men	89 (12%)	11 (26%)	8 (12%)
IV drug	2 (0.3%)	13 (30%)	10 (15%)
Transfusion/ Blood products	1 (0.1%)	3 (7%)	8 (12%)
Multiple (sexual + other)	3 (0.4%)	3 (7%)	2 (3%)
Other	32 (4.3%)	1 (2%)	2 (3%)
Missing	1	2	0

Table S2. HLA-B and HLA-C groups frequencies in the three cohort (Seroconvertors, Controllers and Long Term Non Progressors) with test of comparison between Controllers and Long Term Non Progressors

	Seroconvertors	Controllers	LTNP	p*
HLA-B				
Group				
B07	153(21.0%)	10(22.2%)	4(6.3%)	0.016
B08	108(14.8%)	4(8.9%)	6(9.5%)	1
B13	27(3.7%)	3(6.7%)	4(6.3%)	1
B14	59(8.1%)	9(20.0%)	14(22.2%)	0.781
B15	80(11.0%)	3(6.7%)	3(4.8%)	0.692
B18	109(15.0%)	2(4.4%)	6(9.5%)	0.465
B27	47(6.4%)	8(17.8%)	14(22.2%)	0.572
B35	155(21.3%)	2(4.4%)	6(9.5%)	0.465
B38	26(3.6%)	2(4.4%)	4(6.3%)	1
B39	29(4.0%)	1(2.2%)	5(7.9%)	0.398
B40	78(10.7%)	3(6.7%)	3(4.8%)	0.692
B44	210(28.8%)	10(22.2%)	11(17.5%)	0.538
B49	48(6.6%)	0(0.0%)	3(4.8%)	0.265
B51	92(12.6%)	7(15.6%)	13(20.6%)	0.503
B52	12(1.6%)	3(6.7%)	1(1.6%)	0.306
B57	38(5.2%)	18(40.0%)	14(22.2%)	0.047
B58	15(2.1%)	1(2.2%)	4(6.3%)	0.399
HLA-C				
Group				
Cw01	38(5.3%)	4(8.9%)	5(7.6%)	1
Cw02	78(10.8%)	7(15.6%)	14(21.2%)	0.456
Cw03	143(19.8%)	4(8.9%)	5(7.6%)	1
Cw04	180(25.0%)	6(13.3%)	10(15.2%)	0.789
Cw05	142(19.7%)	8(17.8%)	7(10.6%)	0.278
Cw06	115(16.0%)	17(37.8%)	18(27.3%)	0.243
Cw07	344(47.7%)	15(33.3%)	24(36.4%)	0.743
Cw08	49(6.8%)	9(20.0%)	14(21.2%)	0.878
Cw12	81(11.2%)	7(15.6%)	11(16.7%)	0.877
Cw14	21(2.9%)	6(13.3%)	6(9.1%)	0.542
Cw15	41(5.7%)	0(0.0%)	6(9.1%)	0.08
Cw16	81(11.2%)	1(2.2%)	6(9.1%)	0.238

*Chi-square test or Fisher test comparing the frequencies between Controllers and LTNP

Table S3. Linkage disequilibrium for all HLA-B/HLA-C pairs showing $r^2 > 10\%$

Allele B	Allele C	Haplotype frequency		Linkage disequilibrium	
		Observed	Expected under Linkage Equilibrium	D'	r^2
B07 (11.26%)	C07 (28.86%)	C07	10.32%	0.88	0.24
		CXX	0.94%		
		C07	18.53%		
		CXX	70.2%		
B08 (7.83%)	C07 (28.79%)	C07	7.74%	0.98	0.20
		CXX	0.09%		
		C07	21.05%		
		CXX	71.12%		
B13 ^{2,3} (1.92%)	C06 ^{1,2,3,4,5} (8.11%)	C06	1.92%	1	0.22
		CXX	0%		
		C06	6.2%		
		CXX	91.89%		
B14 ¹ (3.95%)	C08 ¹ (4.07%)	C08	3.86%	0.98	0.93
		CXX	0.09%		
		C08	0.21%		
		CXX	95.84%		
B15 (5.56%)	C03 (10.37%)	C03	3.27%	0.54	0.15
		CXX	2.29%		
		C03	7.1%		
		CXX	87.34%		
B27 ^{1,2,3,5} (3.29%)	C01 (2.74%)	C01	1.13%	0.39	0.13
		CXX	2.16%		
		C01	1.61%		
		CXX	95.1%		
B27 ^{1,2,3,5} (3.29%)	C02 (5.55%)	C02	1.94%	0.57	0.19
		CXX	1.35%		
		C02	3.61%		
		CXX	93.1%		
B35 ^{1,3} (11.57%)	C04 ³ (13.35%)	C04	10.2%	0.86	0.63
		CXX	1.37%		
		C04	3.15%		
		CXX	85.28%		
B38 (1.74%)	C12 (6.04%)	C12	1.74%	1	0.28
		CXX	0%		
		C12	4.3%		
		CXX	93.96%		
B40 (5.36%)	C03 (10.41%)	C03	3.75%	0.66	0.22
		CXX	1.61%		
		C03	6.66%		
		CXX	87.98%		
B44 (15.94%)	C05 (10.52%)	C05	7.18%	0.62	0.24
		CXX	8.76%		
		C05	3.34%		
		CXX	80.72%		
B44 (16.1%)	C16 (5.86%)	C16	5.22%	0.87	0.25
		CXX	10.87%		
		C16	0.64%		
		CXX	83.27%		

B51 (6.61%)	C14 ¹ (1.48%)					1	0.21
	B51	C14	1.48%		0.1%		
	B51	CXX	5.13%		6.52%		
	BXX	C14	0%		1.38%		
	BXX	CXX	93.39%		92%		
B51 (6.62%)	C15 (2.94%)					0.64	0.17
	B51	C15	1.95%		0.19%		
	B51	CXX	4.67%		6.43%		
	BXX	C15	0.99%		2.75%		
	BXX	CXX	92.39%		90.63%		
B52 ² (0.8%)	C12 (6.01%)					1	0.13
	B52	C12	0.8%		0.05%		
	B52	CXX	0%		0.75%		
	BXX	C12	5.2%		5.96%		
	BXX	CXX	93.99%		93.24%		
B57 ^{1,2,3,5} (2.69%)	C06 ^{1,2,3,4,5} (8.09%)					0.91	0.26
	B57	C06	2.47%		0.22%		
	B57	CXX	0.22%		2.47%		
	BXX	C06	5.62%		7.87%		
	BXX	CXX	91.69%		89.44%		

¹ association to the Extreme Phenotype in the univariate analysis, further studied in haplotype analyses (supplementary figures 1, 2, 3, 4, 5)

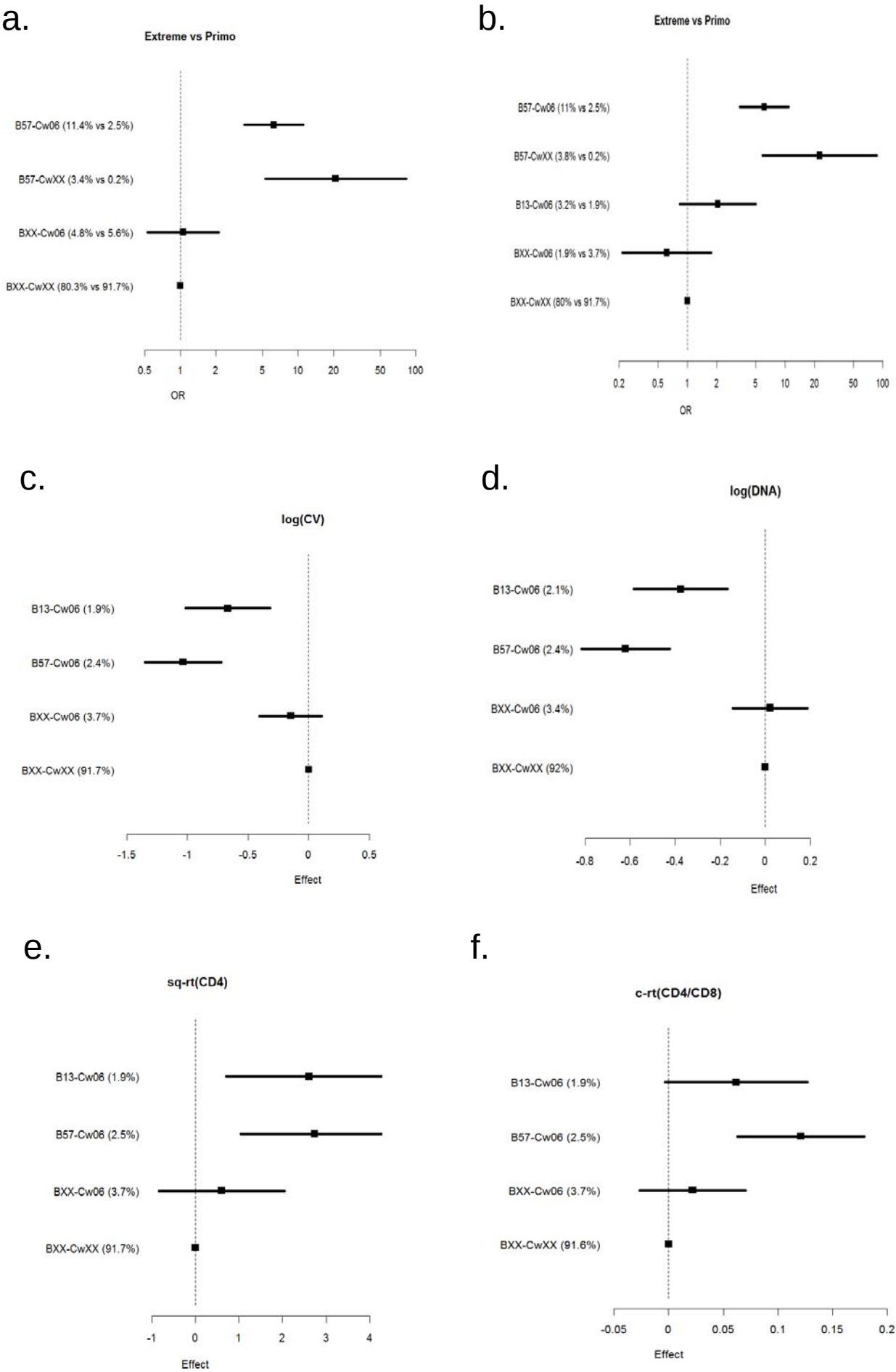
² association to VL in the univariate analysis further studied in haplotype analyses (supplementary figures 1, 3, 6)

³ association to DNA in the univariate analysis further studied in haplotype analyses (supplementary figures 1, 3, 4)

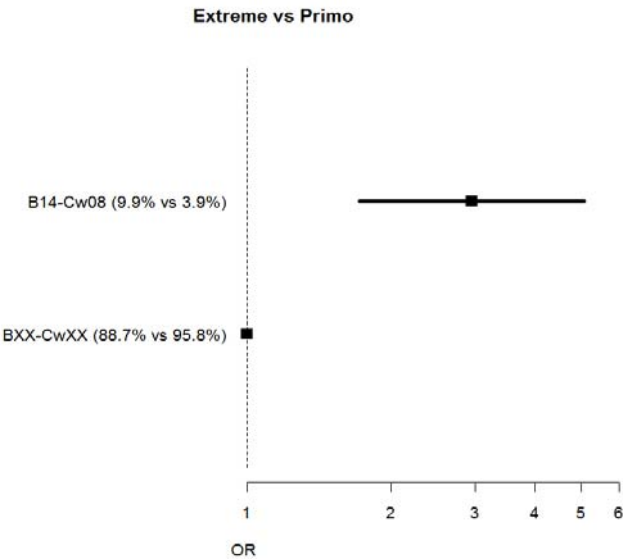
⁴ association to CD4 in the univariate analysis further studied in haplotype analyses (supplementary figure 1)

⁵ association to CD4/CD8 in the univariate analysis further studied in haplotype analyses (supplementary figures 1,3)

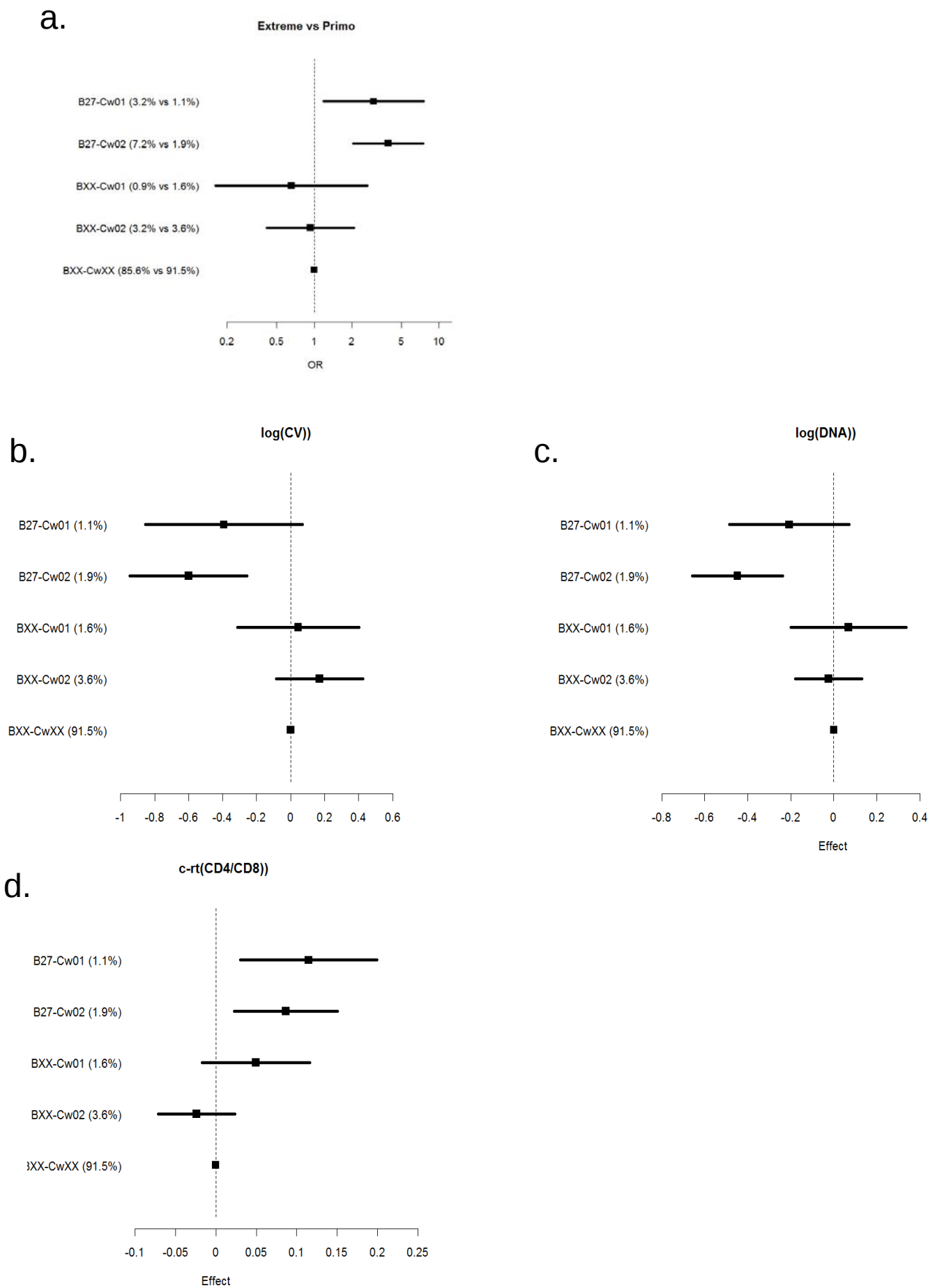
Supplemental Figure 1. Haplotypes B*13/C*06 and B57/C*06



Supplemental Figure 2. Haplotype B*14/C*08

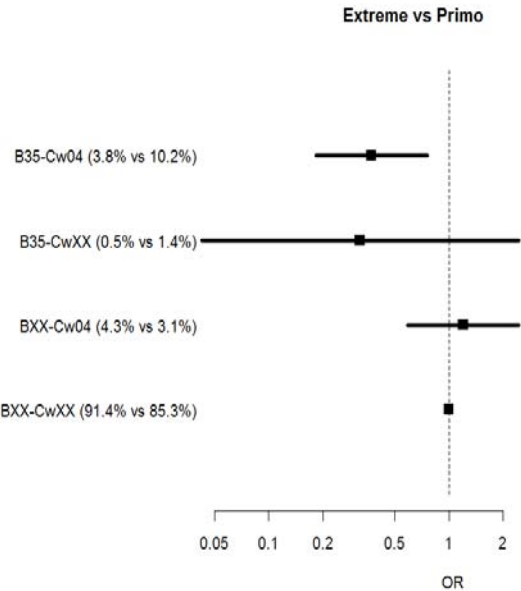


Supplemental Figure 3. Haplotypes B*27/C*01 and B*27/C*02

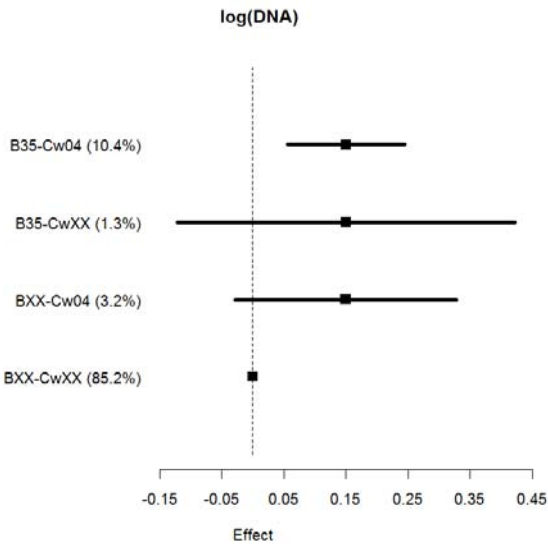


Supplemental Figure 4. Haplotype B*35/C*04

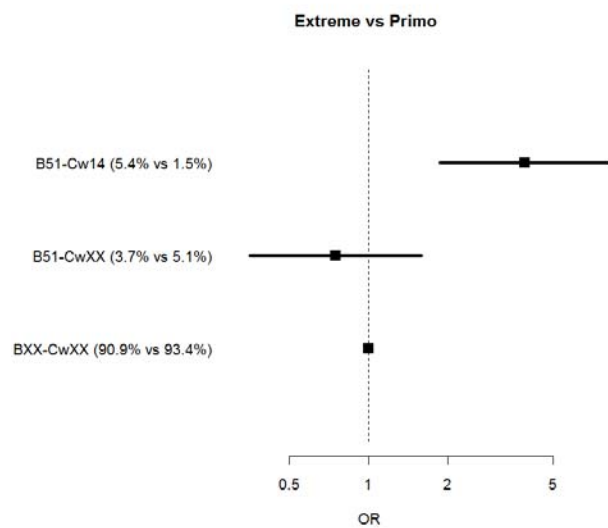
a.



b.



Supplemental Figure 5. Haplotype B*51/C*14



Supplemental Figure 6. Haplotype B*52/C*12

