

Supplementary Table 3a: Principal Phenotype

BLOCK	CLADE	Cases	freq	Controls	freq	chi <sup>2</sup>	P	OR (95 CI)
1	1	251	0.30	371	0.32	0.68	0.409	0.92 (0.77-1.11)
	2	361	0.44	473	0.41	1.23	0.267	1.11 (0.93-1.33)
	3	142	0.17	187	0.16	0.24	0.622	1.07 (0.84-1.36)
2	1	80	0.10	97	0.08	0.78	0.376	1.17 (0.85-1.59)
	2	92	0.11	147	0.13	1.06	0.303	0.86 (0.65-1.13)
	3	109	0.13	170	0.15	0.86	0.354	0.88 (0.68-1.14)
	4	367	0.45	485	0.42	0.94	0.334	1.1 (0.92-1.31)
	5	85	0.10	109	0.09	0.28	0.598	1.1 (0.81-1.48)
3	1	145	0.18	148	0.13	8.03	0.005	1.44 (1.12-1.85)
	2	309	0.38	438	0.38	0.06	0.804	0.97 (0.81-1.17)
	3	225	0.27	355	0.31	2.85	0.091	0.84 (0.69-1.02)
	4	64	0.08	90	0.08	0.00	0.979	0.99 (0.71-1.38)
4	1	131	0.16	167	0.15	0.58	0.446	1.11 (0.87-1.42)
	2	430	0.52	602	0.52	0.00	0.947	0.99 (0.83-1.18)
	3	220	0.27	305	0.27	0.00	0.989	1.01 (0.82-1.23)
5	1	219	0.27	263	0.23	3.30	0.069	1.22 (0.99-1.5)
	2	393	0.48	568	0.49	0.54	0.462	0.93 (0.78-1.11)
	3	30	0.04	35	0.03	0.36	0.550	1.2 (0.73-1.97)
	4	30	0.04	63	0.05	3.24	0.072	0.65 (0.42-1.01)
	5	76	0.09	108	0.09	0.00	0.952	0.98 (0.72-1.33)
6	1	539	0.65	743	0.65	0.07	0.787	1.03 (0.85-1.24)
	2	83	0.10	144	0.13	2.64	0.104	0.78 (0.59-1.04)
	3	83	0.10	96	0.08	1.50	0.221	1.23 (0.9-1.67)
	4	50	0.06	66	0.06	0.04	0.842	1.06 (0.73-1.55)
7	1	595	0.72	880	0.77	4.80	0.028	0.79 (0.64-0.97)
	2	103	0.13	131	0.11	0.44	0.505	1.11 (0.84-1.46)
	3	97	0.12	95	0.08	6.28	0.012	1.48 (1.1-1.99)

Supplementary Table 3b: Refined Phenotype

BLOCK	CLADE	Cases	freq	Controls	freq	chi <sup>2</sup>	P	OR (95 CI)
1	1	131	0.30	371	0.33	1.15	0.283	0.87 (0.69-1.11)
	2	193	0.44	473	0.41	1.17	0.279	1.14 (0.91-1.42)
	3	77	0.18	187	0.16	0.36	0.550	1.11 (0.83-1.48)
2	1	37	0.09	97	0.08	0.00	0.948	1.01 (0.68-1.5)
	2	54	0.12	147	0.13	0.02	0.901	0.97 (0.69-1.35)
	3	58	0.13	170	0.15	0.44	0.505	0.89 (0.64-1.22)
	4	194	0.45	485	0.42	0.62	0.432	1.1 (0.88-1.37)
	5	45	0.10	109	0.09	0.17	0.679	1.1 (0.76-1.59)
3	1	71	0.16	148	0.13	2.83	0.092	1.32 (0.97-1.79)
	2	168	0.39	438	0.38	0.01	0.910	1.02 (0.81-1.28)
	3	116	0.27	355	0.31	2.53	0.111	0.81 (0.63-1.04)
	4	37	0.09	90	0.08	0.11	0.740	1.09 (0.73-1.63)
4	1	74	0.17	167	0.15	1.30	0.254	1.2 (0.89-1.62)
	2	219	0.50	602	0.52	0.47	0.491	0.92 (0.74-1.15)
	3	123	0.28	305	0.27	0.38	0.536	1.09 (0.85-1.38)
5	1	115	0.26	263	0.23	1.97	0.160	1.21 (0.93-1.56)
	2	211	0.49	568	0.49	0.08	0.773	0.96 (0.77-1.2)
	3	14	0.03	35	0.03	0.00	0.991	1.06 (0.56-1.99)
	4	13	0.03	55	0.05	2.07	0.150	0.61 (0.33-1.13)
	5	34	0.08	108	0.09	0.89	0.346	0.81 (0.54-1.21)
6	1	291	0.67	742	0.65	0.62	0.433	1.11 (0.88-1.4)
	2	38	0.09	144	0.13	4.13	0.042	0.67 (0.46-0.97)
	3	43	0.10	96	0.08	0.83	0.361	1.22 (0.83-1.78)
	4	24	0.06	66	0.06	0.00	0.955	0.96 (0.59-1.55)
7	1	306	0.70	880	0.77	6.35	0.012	0.72 (0.56-0.92)
	2	53	0.12	131	0.11	0.12	0.734	1.08 (0.77-1.51)
	3	75	0.17	132	0.11	8.66	0.003	1.61 (1.17-2.18)