

Figure S1

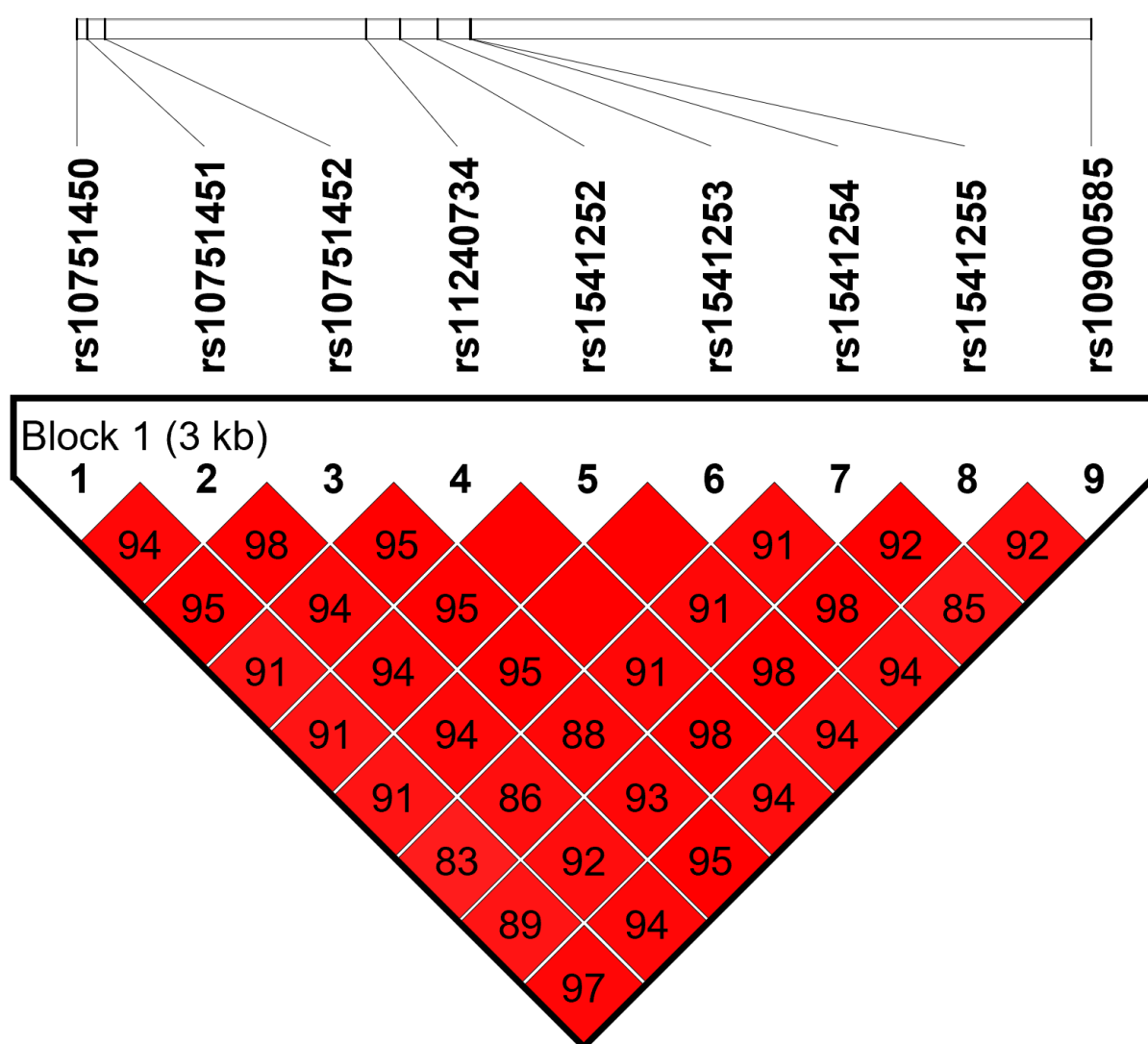


Table S1: Characteristics of study subjects

	Control group (N = 79)	Mild malaria (N = 75)
Gender		
N	78	73
Female	38	34
Male	40	39
Ethnic group^a		
N	75	68
Bambara	8	5
Peulh/Fulani	25	29
Serrere	13	7
Wolof	22	16
Others	7	11
Age^b		
N	76	66
Median	33.0	28.5
(25 th and 75 th percentile)	(23.0-50.3)	(16.5-42.3)
Haematological data^b		
- Red blood cells ($\times 10^6/\mu\text{L}$)		
N	50	66
Median	4.5	4.0
(25 th and 75 th percentile)	(4.0-5.0)	(3.5-4.6)
- Haematocrit (%)		
N	50	66
Median	36.3	34.6
(25 th and 75 th percentile)	(33.2-41.2)	(29.8 – 38.4)
- Haemoglobin (g/dL)		
N	50	66
Median	12.1	11.1
(25 th and 75 th percentile)	(11.2-13.9)	(9.8–12.4)
- Leukocytes ($\times 10^3/\mu\text{L}$)		
N	50	66
Median	6.0	7.9
(25 th and 75 th percentile)	(4.8-7.2)	(5.1–10.8)
- Platelets ($\times 10^3/\mu\text{L}$)		
N	50	66
Median	260	183
(25 th and 75 th percentile)	(222–338)	(109-237)
Successfully genotyped individuals (N)		
For rs10900585, rs10900585, rs11240734, rs1541252, rs1541253, rs1541254, rs1541255	79	75
For rs10751450, rs10751451 and rs10751452	79	74

^aEthnic groups are shown. Other ethnic groups that are Diola, Cap-vert, Soninke, and Soce groups were rare ($n \leq 7$). The ethnic group was unknown for four control subjects and seven malaria patients.

^bMedian and (25th and 75th percentile) are shown

Table S2: SNP minor allele frequency in the study population and in other African populations

SNP	Position	number of genotyped individuals/total samples	MAF in the Senegalese population			MAF in 1000 Genome populations	
			Control group	Mild malaria group	Whole population	Gambia	Africa
rs10751450 (C>T)	203681817	153/154	0.411	0.209	0.314	0.385	0.426
rs10751451 (C>T)	203681850	153/154	0.399	0.209	0.307	0.310	0.366
rs10751452 (T>C)	203681902	153/154	0.392	0.209	0.304	0.310	0.365
rs11240734 (T>C)	203682696	154/154	0.405	0.220	0.315	0.310	0.365
rs1541252 (C>T)	203682799	154/154	0.405	0.220	0.315	0.310	0.365
rs1541253 (C>T)	203682912	154/154	0.405	0.220	0.315	0.310	0.365
rs1541254 (G>C)	203683012	154/154	0.430	0.220	0.328	0.310	0.365
rs1541255 (A>G)	203683013	154/154	0.405	0.213	0.312	0.310	0.365
rs10900585 (T>G)	203684896	154/154	0.411	0.213	0.315	0.363	0.418

Table S3: Genetic association results under the genetic dominant model

		Without covariate			Age as a covariate			Age, gender, ethnic group as covariates		
	Risk Genotype	Odd ratio	95% CI	P value	Odd ratio	95% CI	P value	Odd ratio	95% CI	P value
rs10751450 (C>T)	CC	3.55	1.83-6.91	0.0002	3.52	1.78-6.95	0.0003	3.45	1.73-6.86	0.0004
rs10751451 (C>T)	CC	3.35	1.72-6.51	0.0003	3.32	1.69-6.53	0.0005	3.25	1.64-6.44	0.0007
rs10751452 (T>C)	TT	3.17	1.64-6.14	0.0006	3.13	1.60-6.15	0.0009	3.06	1.55-6.06	0.001
rs11240734 (T>C)	TT	3.42	1.76-6.64	0.0003	3.39	1.72-6.66	0.0004	3.32	1.68-6.57	0.0006
rs1541252 (C>T)	CC	3.42	1.76-6.64	0.0003	3.39	1.72-6.66	0.0004	3.32	1.68-6.57	0.0006
rs1541253 (C>T)	CC	3.42	1.76-6.64	0.0003	3.39	1.72-6.66	0.0004	3.32	1.68-6.57	0.0006
rs1541254 (G>C)	GG	3.62	1.86-7.05	0.0001	3.60	1.83-7.10	0.0002	3.53	1.78-7.01	0.0003
rs1541255 (A>G)	AA	3.62	1.86-7.05	0.0001	3.60	1.83-7.10	0.0002	3.53	1.78-7.01	0.0003
rs10900585 (T>G)	TT	3.42	1.76-6.60	0.0003	3.39	1.72-6.66	0.0004	3.32	1.68-6.57	0.0006
Haplotype ^a	CCTTCCGA/CCTTCCGA	3.53	1.78-7.02	0.0003	3.51	1.74-7.08	0.0004	3.59	1.77-7.27	0.0004

^ars10751450, rs10751451 rs10751452, rs11240734, rs1541252, rs1541253, rs1541254 and rs1541255 were included in haplotype analysis

Table S4: Genetic association results under the genetic additive model

Without covariate					Age as a covariate			Age, gender, ethnic group as covariates		
	Risk allele	Odd ratio	95% CI	P value	Odd ratio	95% CI	P value	Odd ratio	95% CI	P value
rs10751450 (C>T)	C	2.69	1.57-4.59	0.0003	2.65	1.54-4.57	0.0004	2.60	1.51-4.48	0.0006
rs10751451 (C>T)	C	2.56	1.50-4.39	0.0006	2.53	1.47-4.35	0.0008	2.48	1.44-4.27	0.0011
rs10751452 (T>C)	T	2.47	1.45-4.20	0.0009	2.43	1.41-4.15	0.0010	2.38	1.39-4.08	0.0016
rs11240734 (T>C)	T	2.45	1.45-4.15	0.0008	2.42	1.42-4.10	0.0010	2.37	1.39-4.03	0.0015
rs1541252 (C>T)	C	2.45	1.45-4.15	0.0008	2.42	1.42-4.10	0.0010	2.37	1.39-4.03	0.0015
rs1541253 (C>T)	C	2.45	1.45-4.15	0.0008	2.42	1.42-4.10	0.0010	2.37	1.39-4.03	0.0015
rs1541254 (G>C)	G	2.48	1.51-4.08	0.0004	2.42	1.45-4.03	0.0007	2.33	1.39-3.91	0.0014
rs1541255 (A>G)	A	2.54	1.50-4.29	0.0005	2.42	1.46-4.03	0.0008	2.45	1.44-4.18	0.0010
rs10900585 (T>G)	T	2.64	1.55-4.48	0.0004	2.60	1.52-4.46	0.0005	2.55	1.49-4.39	0.0007
Haplotype ^a	CCTTCCGA	2.64	1.53-4.57	0.0005	2.6	1.50-4.52	0.0007	2.62	1.50-4.57	0.0007

^ars10751450, rs10751451 rs10751452, rs11240734, rs1541252, rs1541253, rs1541254 and rs1541255 were included in haplotype analysis