

**Supplementary Table S1. Laboratory isolates: Pfrh1 copy number and microsatellite data.** Supplementary Table S1. Laboratory isolates: Pfrh1 copy number and microsatellite data. Copy number (CN) lower and upper 95% confidence interval, and bp sizes of microsatellite sequences for all isolates are shown. Grey or blue shading indicates groups of parasites that share identity at the microsatellites typed. The single difference at locus C4M30 that distinguishes GCR3-C5 from other members of the FCR3 group most likely results from mutation. CN values are boxed for parasites carrying multiple copies of Pfrh1 and have been confirmed in independent real-time assays.

MR4 #	Parasite name	CN	LR95%	UP95%	Ara2	C4M30	Polya1	TA1	C2M1	C3M54	TA60
MRA-152G	7G8	0.61	0.34	1.11	63	171	184	172	203	266	72
MRA-154G	7G8	0.88	0.80	0.96	63	171	184	172	203	266	72
MRA-346G	Ghana III (Aotus)	0.73	0.62	0.86	66	169	150	169	184	215	90
MRA-394	7C424	1.02	0.92	1.14	66	169	196	140	194	240	81
MRA-767G	HB-2	1.23	1.14	1.33	66	171	181	190	194	240	72
MRA-732G	FCR-8/West African	0.80	0.73	0.87	66	173	152	172	213	258	84
MRA-733G	FCC-2/Hainan	0.72	0.65	0.80	66	175	178	169	228	252	84
MRA-309G	FCB	5.48	4.74	6.32	66	177	152	163	196	258	84
MRA-321G	FCR3CSA	4.59	4.09	5.15	66	177	152	163	196	258	84
MRA-737G	FCR-3/Gambia Clone 1	5.08	4.44	5.81	66	177	152	163	196	258	84
MRA-738G	FCR-3/Gambia Clone D3	5.67	5.03	6.39	66	177	152	163	196	258	84
MRA-739G	FCR-3/Gambia Clone D-4, Knobless	7.28	6.30	8.40	66	177	152	163	196	258	84
MRA-699G	FCR3-C5	0.73	0.54	0.99	66	175	152	163	196	258	84
MRA-153G	T9/94	0.84	0.74	0.95	66	177	152	163	196	258	84
MRA-326G	ITG-2G2	0.91	0.66	1.25	66	177	152	163	196	258	84
MRA-327G	ITG-2F6	1.03	0.76	1.40	66	177	152	163	196	258	84
MRA-731G	FCR3/Gambia	0.94	0.81	1.10	66	177	152	163	196	258	84
MRA-736G	FCR-3/FMG (Gambia)	0.97	0.73	1.28	66	177	152	163	196	258	84
MRA-818G	T2/C6	1.03	0.89	1.19	66	183	171	160	184	252	87
MRA-149G	HB3-B2	0.94	0.84	1.05	66	183	181	140	194	240	81
MRA-155G	HB3	0.84	0.74	0.95	66	183	181	140	194	240	81
MRA-393	QC01	1.10	1.04	1.16	66	183	181	140	196	234	84
MRA-331G	St Lucia	0.83	0.69	1.00	66	185	181	140	184	250	81
MRA-201G	D10	0.82	0.71	0.96	66	193	152	172	215	244	90
MRA-206G	TM91C235	0.40	0.34	0.47	69	167	162	166	209	234	81
MRA-200G	RO-33	0.77	0.67	0.88	69	171	156	169	188	250	72
MRA-821G	KMW11	0.64	0.56	0.72	69	175	171	172	201	252	75
MRA-159G	K1 Strain	0.67	0.48	0.94	69	187	178	166	203	234	84
MRA-202G	TM90C2A	1.95	1.81	2.11	69	189	152	166	184	212	72
MRA-151G	3D7A	0.80	0.59	1.09	69	197	152	184	217	238	84
MRA-398	D6	0.78	0.68	0.90	72	169	168	169	186	234	72
MRA-285G	D6	0.89	0.77	1.02	72	169	168	169	186	234	72
MRA-157G	W2	1.84	1.61	2.11	72	169	196	166	196	234	84
MRA-387	Dd2	0.68	0.57	0.80	72	169	196	166	196	234	84
MRA-150G	Dd2	0.89	0.80	1.00	72	169	196	166	196	234	84
MRA-156G	Dd2	0.67	0.50	0.89	72	169	196	166	196	234	84
MRA-823G	LF4	0.92	0.71	1.20	72	175	178	184	217	234	81
MRA-205G	TM90C6B	0.89	0.75	1.05	75	169	156	166	184	234	87
MRA-176G	V1/S	0.77	0.68	0.87	75	175	196	166	180	234	93
MRA-820G	V1/S	0.91	0.81	1.02	75	175	196	166	180	234	93
MRA-284G	WR87	0.72	0.66	0.79	75	187	171	157	221	238	81
MRA-822G	MT/S1	0.62	0.57	0.68	75	187	171	157	221	238	81
MRA-819G	INDO	7.93	6.74	9.34	75	193	152	157	203	195	81
MRA-358G	Montagnard	1.08	1.01	1.17	75	nd	175	166	201	nd	84
MRA-204G	TM90C6A	0.80	0.68	0.94	75	191	178	166	203	252	84
MRA-207G	TM93C1088	0.70	0.57	0.86	75	191	178	166	203	252	84
MRA-328G	MalayanCamp K-	0.99	0.84	1.15	81	199	196	175	228	226	81
MRA-329G	MalayanCamp R-	0.91	0.77	1.06	81	199	196	175	228	226	81
MRA-330G	MalayanCamp R+	0.92	0.87	0.98	81	199	196	175	228	226	81