

Supporting Information

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Table S1. SIVgor infection in wild gorillas

Collection sites*	Country	Subspecies	No. of fecal samples collected	No. of SIVgor antibody-positive samples	Estimated no. of gorillas [†]	No. of SIVgor antibody-positive gorillas [‡]	No. of vRNA-positive samples	No. of vRNA-positive gorillas [§]	SIVgor prevalence, % [¶]	95% confidence interval, % [¶]
AK	Cameroon	<i>G.g.g.</i>	12	0	7	0	0	0	0	na
AM	Cameroon	<i>G.g.g.</i>	104	0	58	0	0	0	0	0–6.2
BP	Cameroon	<i>G.g.g.</i>	161	48	55	10 (+2) [#]	36	7	22	12.9–34.8
BQ	Cameroon	<i>G.g.g.</i>	435	9	132	1	6	1	0.8	0–4.2
BY	Cameroon	<i>G.g.g.</i>	141	0	78	0	0	0	0	0–4.7
DJ	Cameroon	<i>G.g.g.</i>	237	12	99	4	4	3	4	1.6–9.9
DK	Cameroon	<i>G.g.g.</i>	11	0	6	0	0	0	0	na
EK	Cameroon	<i>G.g.g.</i>	101	0	43	0	0	0	0	0–8.2
HC	Cameroon	<i>G.g.g.</i>	11	0	6	0	0	0	0	na
LD	Cameroon	<i>G.g.g.</i>	146	1	50	1	0	0	2	0.3–10.5
MB	Cameroon	<i>G.g.g.</i>	118	0	49	0	0	0	0	0–7.3
MI	Cameroon	<i>G.g.g.</i>	22	0	12	0	0	0	0	na
NG	Cameroon	<i>G.g.g.</i>	167	0	93	0	0	0	0	0–4
NY	Cameroon	<i>G.g.g.</i>	30	0	12	0	0	0	0	na
LE	Gabon	<i>G.g.g.</i>	18	0	10	0	0	0	0	na
LO	Gabon	<i>G.g.g.</i>	35	0	19	0	0	0	0	0–16.8
MI	Gabon	<i>G.g.g.</i>	365	0	152	0	0	0	0	0–2.5
MK	Gabon	<i>G.g.g.</i>	21	0	12	0	0	0	0	na
LA	Gabon	<i>G.g.g.</i>	72	0	40	0	0	0	0	0–8.8
MA	Gabon	<i>G.g.g.</i>	67	0	20	0	0	0	0	0–16.1
MC	Gabon	<i>G.g.g.</i>	7	0	4	0	0	0	0	na
IV	Gabon	<i>G.g.g.</i>	3	0	1	0	0	0	0	na
DJ	Gabon	<i>G.g.g.</i>	34	0	19	0	0	0	0	0–16.8
ML	Gabon	<i>G.g.g.</i>	10	0	4	0	0	0	0	na
WA	Gabon	<i>G.g.g.</i>	31	0	17	0	0	0	0	0–18.4
LN	Gabon	<i>G.g.g.</i>	22	0	9	0	0	0	0	na
OY	Gabon	<i>G.g.g.</i>	77	0	32	0	0	0	0	0–10.7
IY	Gabon	<i>G.g.g.</i>	27	0	15	0	0	0	0	0–20.4
OD	Gabon	<i>G.g.g.</i>	1	0	1	0	0	0	0	na
LO	Gabon	<i>G.g.g.</i>	125	0	69	0	0	0	0	0–5.5
<i>n</i> = 33			2,611	70	1,134	16 (+2) [#]	46	11	1.6	1.0–2.5
VR	DRC	<i>G.b.b.</i>	97	0	51	0	0	0	0	0–7.0
BI	Uganda	<i>G.b.b.</i>	121	0	64	0	0	0	0	0–5.7
KB	DRC	<i>G.b.g.</i>	103	0	54	0	0	0	0	0–6.6
<i>n</i> = 3			321	0	169	0	0	0	0	0–2.2
Total			2,932	70	1,303	18	46	11		

G.b.b., *Gorilla berengei berengei*; *G.b.g.*, *Gorilla berengei graueri*; *G.g.g.*, *Gorilla gorilla gorilla*; na, not applicable.

*Collection sites are indicated with a two letter code, and their locations are shown in Fig. 1.

[†]Number of sampled gorillas was estimated as described in *Materials and Methods*.

[‡]Number of SIVgor-infected gorillas was determined by microsatellite analysis.

[§]Viral RNA (vRNA) was detected by RT-qPCR and/or nested PCR; the number of vRNA-positive individuals was determined by microsatellite analysis.

[¶]Prevalence of SIVgor infection was estimated based on the proportion of SIVgor-positive gorillas; confidence intervals were only calculated when the number of gorillas was greater than 15.

[#]At the BP site, two additional SIVgor-infected gorillas were identified by RT-qPCR (*Results*).

Table S2. Noninvasive testing of SIVgor infected gorillas from four field sites

Site*	Identification no. [†]	Group [‡]	Date of collection day/month/year	Sample no.	Details [§]	Serology, INNO-LIA	Real-time qPCR, copies per milliliter [¶]			Other sequence data			Gender	D18S536	D4S243	D105676	D95922	D251326	D251333	D4S1627
							PCR	gp41 PCR	gp41 PCR	Other sequence data	Gender									
BP	BPg-ID1	A	19/03/12	BP7981	t	+	146	+	+	3,729 bp (FL)	F	146/150	181/189	196/196	-/272	255/267	298/334	234/250		
			19/03/12	BP7986	t	-	-	nd	nd	181/189	F	146/150	181/189	196/196	-/272	255/267	298/334	234/250		
			20/03/12	BP7993	n	+	203	+	+	7,872 bp (FL)	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			15/06/12	BP8262	n	+	-	-	-	Partial gag	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			15/06/12	BP8263	n	+	-	-	-	+	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			15/06/12	BP8264	n	+	168	+	-	+	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			15/06/12	BP8265	n	+	-	-	-	+	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			15/06/12	BP8266	n	+	200	+	-	+	F	146/150	181/189	196/196	260/272	255/267	298/334	234/250		
			25/07/12	BP8292	t	+	1,099	-	-	-	F	146/150	181/189	196/196	-/272	255/267	-/334	234/250		
			25/07/12	BP8295	t	+	523	-	-	-	F	146/150	181/189	196/196	-/272	255/267	-/334	234/250		
			25/07/12	BP8296	t	+	558	-	-	-	F	146/150	181/189	196/196	-/272	255/267	-/334	234/250		
			25/07/12	BP8303	t	+	295	+	-	-	F	146/150	181/189	196/196	-/272	255/267	-/334	234/250		
			25/07/12	BP8304	t	+	188	-	-	-	F	146/150	181/189	196/196	-/272	255/267	-/334	234/250		
			15/06/12	BP8240	t	-	839	-	-	-	F	146/150	177/197	192/196	272/276	255/271	330/334	234/234		
			15/06/12	BP8243	t	-	822	nd	nd	nd	F	146/150	177/197	192/196	272/276	255/271	330/334	234/234		
			15/06/12	BP8254	n	-	-	nd	nd	-	F	146/150	177/197	192/196	272/276	255/271	-/334	234/234		
			15/06/12	BP8257	n	+	1,114	+	+	7,006 bp	F	146/150	177/197	192/196	272/276	255/271	330/334	234/234		
			15/06/12	BP8258	n	+	296	-	-	-	F	146/150	177/197	192/196	272/276	255/271	330/334	234/234		
			15/06/12	BP8259	n	+	1,207	+	+	2,433 bp	F	146/150	177/197	192/196	272/276	255/271	330/334	234/234		
			25/07/12	BP8301	t	+	656	nd	-	-	F	-/150	177/-	-/196	272/276	255/271	330/334	234/234		
			25/07/12	BP8302	t	-	160	nd	nd	nd	F	146/150	177/197	192/196	-/276	255/271	330/334	234/234		
			19/03/12	BP7978	t	-	-	nd	nd	nd	F	154/154	177/181	196/200	266/274	263/-	318/334	234/238		
			19/03/12	BP7982	t	-	73	nd	nd	nd	F	154/154	177/181	196/200	266/274	263/-	318/334	234/238		
			19/03/12	BP7983	t	-	82	nd	nd	nd	F	154/154	177/181	196/200	-/274	263/279	318/334	234/238		
			19/03/12	BP7984	t	-	-	nd	nd	nd	F	154/154	177/181	196/200	266/274	263/279	318/334	234/238		
			19/03/12	BP7988	t	-	-	nd	nd	nd	F	154/154	177/181	196/200	-/274	266/274	318/334	234/238		
			15/06/12	BP8255	n	-	1,874	+	+	2,113 bp	F	154/154	177/181	196/-	266/274	263/279	318/334	234/238		
			15/06/12	BP8256	n	-	706	+	+	6,186 bp	F	154/154	177/181	196/200	266/274	263/279	318/334	234/238		
			25/07/12	BP8298	-	-	nd	nd	nd	-	M	154/154	177/181	196/200	266/274	263/279	318/334	234/238		
			25/07/12	BP8299	n	-	1,138	+	-	-	F	154/154	177/181	196/200	266/274	263/279	318/334	234/238		
			25/07/12	BP8300	n	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	318/334	234/238		
			19/03/12	BP7977	t	-	-	nd	nd	-	M	-/158	177/177	196/196	276/276	259/271	-/-	230/242		
			19/03/12	BP7985	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	-/330	230/242		
			19/03/12	BP7987	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	296/330	230/242		
			19/03/12	BP7989	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	296/330	230/242		
			19/03/12	BP7990	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	296/330	230/242		
			20/03/12	BP7991	n	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	296/330	230/242		
			20/03/12	BP7992	n	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	296/330	230/242		
			20/03/12	BP7994	n	-	-	nd	nd	-	M	-/158	177/177	196/196	276/276	259/271	-/330	230/242		
			15/06/12	BP8242	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	-/330	230/242		
			15/06/12	BP8245	t	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	-/330	230/242		
			15/06/12	BP8249	n	-	-	nd	nd	-	M	146/158	177/177	196/196	276/276	259/271	-/330	230/242		

Table S2. Cont.

Site*	Identification no. [†]	Group [‡]	Date of collection day/month/year	Sample no.	Details [§]	Serology, INNO-LIA	Real-time qPCR, copies per milliliter [¶]	pol PCR	gp41 PCR	Other sequence data	Gender	D18S536	D4S243	D10S676	D9S922	D25I326	D25I333	D4S1627		
BPg-ID9	B	25/07/12	BP8294	n	+	-	-	-	-	M	146/158	177/177	196/196	276/276	259/271	-/330	230/242			
BPg-ID9	B	12/04/13	BP9084	t	+	455	+	-	-	M	150/154	181/189	196/196	262/266	271/281	330/334	230/-			
BPg-ID9	B	13/04/13	BP9108	n	+	216	-	-	-	-	-/-	181/189	196/196	262/266	271/281	330/-	-/246			
BPg-ID10	B	12/04/13	BP9112	n	+	611	-	-	-	M	150/154	181/189	196/196	262/266	271/281	330/334	230/246			
BPg-ID10	B	12/04/13	BP9088	t	+	-	-	-	-	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID10	B	12/04/13	BP9089	t	+	-	-	-	-	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID10	B	13/04/13	BP9090	n	+	-	-	-	+	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID10	B	13/04/13	BP9098	n	+	-	-	-	-	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID11	B	13/04/13	BP9127	t	-	-	-	-	nd	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID11	B	13/04/13	BP9133	t	+	58	-	-	-	F	150/154	177/197	196/196	266/278	255/271	296/322	226/234			
BPg-ID11	B	13/04/13	BP9097	n	+	-	-	-	-	M	150/154	189/197	196/196	262/278	267/271	322/330	234/274			
BPg-ID11	B	13/04/13	BP9100	n	+	-	-	-	-	M	150/154	189/197	196/196	262/278	-/271	322/330	234/274			
BPg-ID13	B	13/04/13	BP9101	n	+	-	-	-	-	F	146/150	177/177	192/200	266/274	263/271	298/302	226/246			
BPg-ID13	B	13/04/13	BP9120	n	+	-	-	-	-	F	146/150	177/177	192/200	266/274	263/271	298/302	226/246			
BPg-ID15	B	12/04/13	BP9087	t	-	1,491	+	+	7,184 bp (FL)	M	150/154	189/189	196/196	262/270	271/279	314/330	230/274			
BPg-ID15	B	13/04/13	BP9114	n	+	-	-	-	nd	+	+	Partial gag	M	150/154	189/189	196/196	262/270	271/279	314/330	230/274
BPg-ID15	B	13/04/13	BP9117	n	+	488	+	+	7,184 bp (FL)	M	150/154	189/189	196/196	262/270	271/279	314/330	230/274			
BPg-ID15	B	13/04/13	BP9118	n	-	2,081	+	+	4,402 bp (FL)	M	150/154	189/189	196/196	262/270	271/279	314/330	230/274			
BPg-ID15	B	13/04/13	BP9132	n	+	280	+	+	-	M?	146/150	-/-	-/200	266/274	255/255	-/334	226/246			
BPg-ID16	B	13/04/13	BP9121	n	+	-	-	-	-	F	146/150	-/-	-/-	266/266	259/263	300/300	226/246			
BPg-ID17	B	13/04/13	BP9131	t	+	-	-	-	-	M	146/154	177/189	192/196	262/270	271/-	314/330	230/274			
BPg-ID17	B	13/04/13	BP9111	n	-	788	-	-	-	M	146/154	177/189	192/196	262/270	271/-	314/330	230/274			
BPg-ID19	B	13/04/13	BP9119	n	-	327	-	-	-	M	146/154	177/189	192/196	262/270	271/-	314/330	230/274			
BPg-ID19	B	13/04/13	BP9122	n	-	596	-	-	-	M	-/154	177/189	192/196	-/266	271/279	300/330	226/230			
LD	LDg-ID1	1/08/12	LD8307	t	-	-	-	-	-	F	142/150	177/197	196/200	266/270	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8338	t	-	-	-	-	-	F	142/150	177/197	196/200	266/270	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8309	t	-	-	-	-	-	F	142/150	177/197	196/-	266/-	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8310	t	-	-	-	-	-	F	142/150	177/197	196/200	266/270	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8311	t	-	-	-	-	-	F	142/150	177/197	196/200	266/270	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8312	t	-	-	-	-	-	F	142/150	177/197	196/200	266/270	267/271	318/334	238/242			
LD	LDg-ID1	1/08/12	LD8317	t	-	-	-	-	-	F	142/150	177/197	196/200	-/270	267/271	318/334	238/242			
BQ	BQg-ID2	10/11/11	BQ7063	n	+	-	-	-	-	F	146/150	-/-	-/200-	270/274	251/275	314/334	-/-			
BQ	BQg-ID2	4/05/12	BQ 8480	n	+	-	-	-	-	F	146/150	181/189	-/-	270/274	251/275	314/334	234/238			
BQ	BQg-ID2	7/06/12	BQ 8486	n	+	322	+	-	-	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
BQ	BQg-ID2	11/06/12	BQ 8497	n	+	1,347	+	+	7,097 bp (FL)	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
BQ	BQg-ID2	6/08/12	BQ 8757	t	+	735	+	+	6,602 bp (FL)	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
BQ	BQg-ID2	6/08/12	BQ 8760	t	+	24	-	+	886 bp (FL)	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
BQ	BQg-ID2	8/08/12	BQ 8769	t	+	-	-	-	-	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
DJ	DJg-ID1	2/11/12	BQ 8662	n	+	345	-	-	-	F	146/150	181/189	200/208	270/274	251/275	314/334	234/238			
DJ	DJg-ID1	3/11/12	BQ 8676	n	+	263	-	+	283 bp (FL)	F	146/146	185/189	196/204	272/280	271/275	318/322	231/243			
DJ	DJg-ID1	11/02/10	DJ 5189	t	+	2,736	-	-	-	F	-/146	185/189	196/204	272/280	271/275	318/322	231/243			
DJ	DJg-ID1	11/02/10	DJ 524	n	+	1,418	-	-	-	F	-	-	-	-	-	-	-			

Table S2. Cont.

Site*	Identification no. [†]	Group [‡]	Date of collection day/month/year	Sample no.	Details [§]	Serology, INNO-LIA	Real-time qPCR, copies per milliliter [¶]			Other sequence data							
							PCR	pol PCR	gp41 PCR	Gender	D185536	D4S243	D105676	D95922	D251326	D251333	D4S1627
D1g-ID2	14/02/10	DJ 5257	n	+	—	—	+	—	—	F	146/146	185/189	196/204	272/280	271/275	318/322	231/243
	14/02/10	DJ 5265	n	+	—	—	—	—	—	F	—/146	185/189	196/204	272/280	271/275	318/322	231/243
	15/02/10	DJ 5272	n	+	—	—	—	—	—	F	146/146	—/189	196/204	272/280	271/275	318/322	231/243
	11/02/10	DJ 5194	t	+	—	—	—	—	—	F	146/146	189/193	196/204	264/280	275/275	294/318	231/243
D1g-ID6	11/02/10	DJ 5204	t	+	—	—	—	—	—	F	146/146	189/193	196/204	264/280	275/275	294/318	231/243
	4/12/2010	DJ 6259	n	+	—	401	—	—	—	M?	146/146	—/—	204/204	272/284	267/279	296/334	242/250
	6/12/2010	DJ 6279	n	+	86	—	—	—	—	F	146/150	189/189	196/204	272/280	263/267	296/334	242/242

F, female; FL, full-length; M, male; nd, not done; ?, degraded sample; — and —/—, repeatedly negative or inconclusive results.

*Location of field sites is shown in Fig. 1.

[†]Samples from the same individual were identified by microsatellite analysis.

[‡]Nesting groups were identified by combining microsatellite and field data as described in *Materials and Methods*; each nesting group has been identified by a letter code.

[§]Location of samples at the time of collection at nests (n) or tracks (t) through the forest.

[¶]Copies of viral RNA per milliliter of fecal RNA/after mixture (1:1 ratio).

Table S3. Primer sets used to amplify partial SIVgor *gag*, *pol*, and *env* sequences

Fragment name	Gene	Round	Primer	Primer sequences (5'-3')*	Amplicon size, bp	Ref.
Polmini	<i>pol</i>	1	Polmini F1	CATGTRGCHAGTGGNTWCMTAGARGCAGARGT	518	(1)
		2	Polmini R1	ACBACYGCNCCTTCCTTC		
		2	Polmini F2	AYAAYCCHCAAAGTCAGGAGTRGT	285	
		2	Polmini R2	GTCCTTTCCAAATDGGRTCTTGCTGTC		
PgorGAG [†]	<i>gag</i>	1	PgorGAGF1	AGGGRCTAAGGAACCATTYMGAG	513	
		2	PgorGAGR1	CTGYACATAGTTGCCTGGCCTCT		
		2	PgorGAGF2	ATTCTACAAAACYCTCAGAGC	408	
		2	PgorGAGR2	CTGATYTGCAGTCCTTCATTGRT		
GOR-GP41	<i>env</i>	1	GOR-GP41 F1	AGCARGAATTGCTGAGACTYCTG	359	(2)
		2	GOR-GP41 R1	CCANTNTGTTATGTCAGCCAAC		
		2	GOR-GP41 F2	GGCATAAGACARCTCMGAGCTCGC	315	
		2	GOR-GP41 R2	AAGCCAACCTCCAAAGRTCTGC		
GP41	<i>env</i>	1	CPZ-gp41-F1	TCTTAGGAGCAGCAGGAAGCACTATGGG	595	(3)
		2	CPZ-gp41-R1	AACGACAAAGGTGAGTATCCCTGCCTAA		
		2	CPZ-gp41-F2	ACAATTATTGTCGGTATAGTGCAACAGCA	454	
		2	CPZ-gp41-R2a	TCCTACTATCATATTGAATATTTATATA		
GP41-Nef	<i>env</i>	1	GP41nefF1b	AWTGGYTRWGGTAYATHARRAT	704	(4)
		2	GP41nefR1b	CCCHTCAGTCYYCCCTTTTC		
		2	GP41nefF2c	TAGTAAVWAGAGTTAGGCAGGG	692	
		2	GP41nefR2b	CAGTCYYCCCTTTCTTYAAAAA		
BQgorGP41 [†]	<i>env</i>	1	BQgorgp41F1	AGCTGCCCTGGCATWGARAC	289	
		2	BQgorgp41R1	CCAMARATCTGCCCACTTRTCYAA		
		2	BQgorgp41F2	AGCAACTCCTRGGMCTGTGGGG	155	
		2	BQgorgp41R2	GTARTTGTCTACCARTTGTCCCCATT		

*B = C/G/T, D = A/G/T, H = A/C/T, M = A/C, N = A/C/T/G, R = A/G, V = A/C/G, Y = C/T, W = A/T.

[†]Primers designed for this study.

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