

Supplementary FIGURE 1. Surface plasmon resonance analysis of mAb and soluble CD4 binding to SIV_{mac239}.

(A) Interaction of an extended panel of mAb with HIV-1_{UG37} or SIV_{mac239} is shown as in Fig.1C. (B) Kinetic data of monomeric soluble CD4 interaction with HIV-1 and SIV_{mac239} gp140s was recorded and fitted to a 1:1 Langmuir binding model. Traces are plotted in black with curves showing the fit results overlain in red. (C) Sequence alignment of the gp160 sequences from the HIV-1 variants ITM1_4, YU2, UG37 Bx08, ctl21 and ctl127 as well as from SIV_{mac239} shaded by sequence conservation. The V1/V2, V3 regions as well as the V4 and V5 loops are highlighted.



Supplementary FIGURE 2. Entire panel of animals tested in the peptide inhibition assay.

Individual results of the peptide inhibition assay as presented in Fig.6A. Percent neutralization is depicted on the y-axis and concentration of purified IgG on the x-axis. (A) Neutralization is displayed for individual animals in the absence (black) or presence of a peptide covering the V3 region from HIV-1 clade B virus MN.3 (dark grey) or a scrambled control peptide (light grey). Peptide controls without IgG did not result in significant enhancement or neutralization of the virus.

	ID50 in TZM-bl Cells ¹					ID50 in A3R5.7 Cells ¹			
					7312A/	9020.A13.	RHPA.	CH77.	SC22.3C2.
Sample ID	MN.3	SF162.LS	MW965.26	TH023.6	V434M	LucR	LucR	LucR	LucR
	Clade B Tier 1	Clade B Tier 1	Clade C Tier 1	CRF01AE Tier 1	HIV-2	Clade B Tier 1	Clade B Tier 1B	Clade B Tier 2	Clade B Tier 2
Gr.1 A1	335	153	33	31		385	215	783	103
Gr.1 A2	4480	1156	144	1625	2074	1215	429	20	132
Gr.1 A3	218	447	111	43	230	1230	348	70	74
Gr.1 A4	186	88	20	45		270	206	20	20
Gr.1 A5	3165	1582	2754	2790		1223	797	240	100
Gr.1 A8	20254	3583	144	115	149	5595	2206	1889	154
Gr.1 B1	174	104	119	20		433	199	20	44
Gr.1 B2	1076	20	168	98	1918	1685	1330	20	355
Gr.1 B3	1535	1627	316	135		809	287	20	21
Gr.1 B6	294	277	20	20		634	355	589	58
Gr.1 B7	213	270	32	20	501	1282	311	20	47
Gr.1 B8	1881	97	29	20	765	4327	1457	20	106
Gr.2 C3	93	34	37	27		411	159	20	62
Gr.2 C4	361	126	67	25		289	122	20	20
Gr.2 C5	362	34	21	20		638	132	20	58
Gr.2 C6	27940	3833	203	90	573	2985	450	1530	156
Gr.2 C7	1029	724	189	45	574	702	261	20	36
Gr.2 C8	279	185	255	190	266	238	235	20	20
Gr.2 D1	2153	1426	143	30		949	263	20	20
Gr.2 D2	6058	642	80	21	1103	3262	751	20	99
Gr.2 D3	248	255	57	22		760	222	20	38
Gr.2 D4	27652	579	93	74	496	1442	271	20	29
Gr.2 D5	591	356	257	68		994	462	1429	89
Gr.2 D7	6465	394			1016	602	325	113	54

Supplementary Table 1. Potent neutralization ID₅₀ titres after immunization.

Serum ID50 titres obtained from individual animals at week 22 from the first study (Group (Gr) 1(no adjuvant) and 2(AAC adjuvant)) are color coded as follows: white boxes, titre<20; green boxes, titre<100; yellow boxes, titre<500; orange boxes, titre<1000; and red boxes, titre >1000. Grey boxes, not determined

Additional viruses tested in TZM-bl assay and all samples below 100; JR-FL, Q23.17, 6535.3, QH0692.42