

**Table S9. Amino acid residues positioned at 39 and 48 of the 24 IMCs used in this study.**

Group	Subtype	Category*	Strain†	Residues		Anti-A3H-II activity‡	Reference§
				39	48		
M	B		Hyper HIV-1	F	H	+	25411794
M	B		Hypo HIV-1	V	N	-	25411794
M	B		NLCSFV3	F	N	-	9847335
M	B		JRCSF	I	N	-	3646751
M	B		AD8	V	N	-	8835195
M	B	TF	AD17	S	H	-	18256145
M	B	TF	CH470	F	H	+	23542380
M	B	TF	REJO	F	H	+	19487424
M	B	TF	RHPA	W	H	-	19487424
M	B	TF	CH058	F	H	+	19487424
M	B	TF	WITO	F	H	+	19487424
M	B	CC	CH058-6mo	F	H	+	19487424
M	B	CC	MCST	S	H	-	23542380
M	C	TF	ZM247v2	F	H	+	20485520
M	C	TF	CH042	F	H	+	23542380
M	C	TF	CH185	Y	H	+	23542380
M	C	TF	CH200v1	F	H	+	23542380
M	C	CC	CH269	F	H	+	23542380
M	C	CC	CH293	F	H	+	23542380
M	C	CC	CH440	F	H	+	23542380
N			DJO0131	Y	H	-	23308067
O			BCF183	Y	N	+	X
O			RBF206	L	N	+	X
P			RBF168	F	H	+	GQ328744

\* TF, transmitted/founder; CC, chronic control.

† Hyper HIV-1 and hypo HIV-1 is based on strain NLCSFV3.

‡ Determined by the experiments shown in Figures 5C and S3.

§ For the reference of each virus, PMIDs (<https://www.ncbi.nlm.nih.gov/pubmed>) are listed. For RBF168, GenBank accession number is listed. X, not available.