

Supplemental data

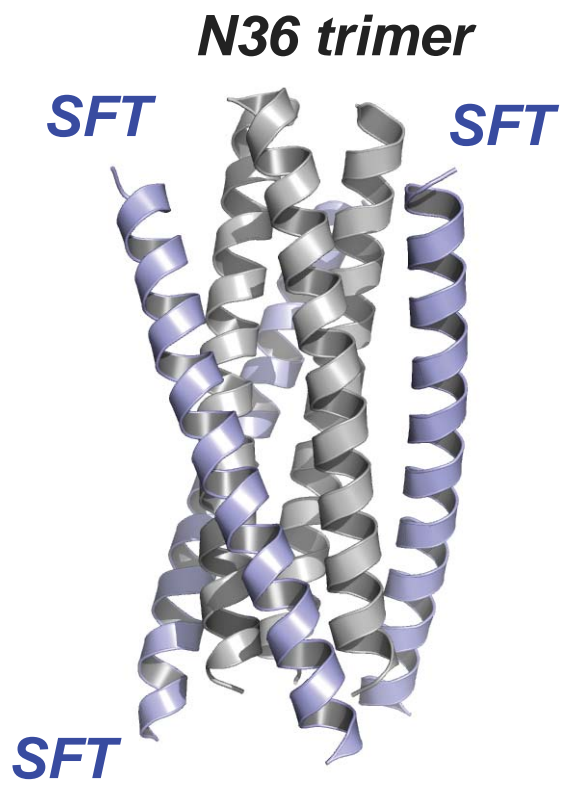
Figure S1. The 6-HB structure formed by SFT and N36 peptides. Ribbon model of 6-HB form by SFT and N36 (HIV gp41 NHR₃₅₋₇₀) in different views with the labels. (A) Side view of the 6-HB; (B) Top view of the 6-HB. The N36 peptides are colored in gray; the SFT peptides are colored in light blue.

Figure S2. Phylogenetic analysis of 43 HIV-1 Env sequences derived from the subtypes A, B and C that dominate the AIDS epidemics worldwide, and subtype B', CRF07_BC and CRF01_AE recombinants that are currently circulating in China.

Table S1. Sequence alignment of the NHR and CHR of HIV-1 gp41. Both NHR and CHR sequences show high variability.

Fig. S1

A



B

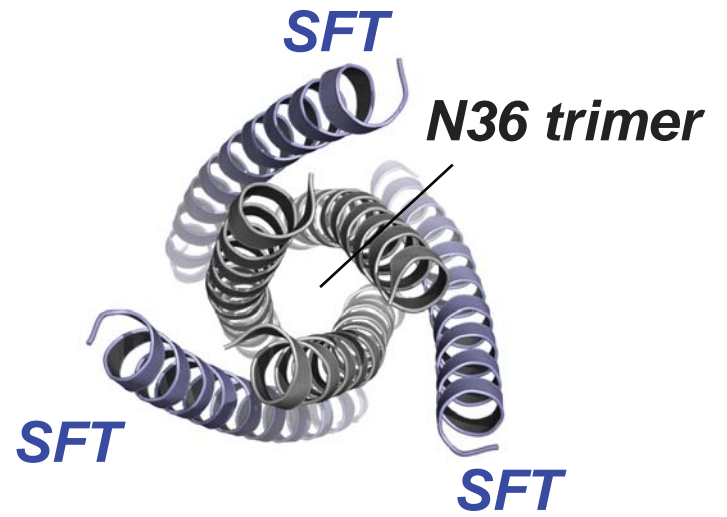
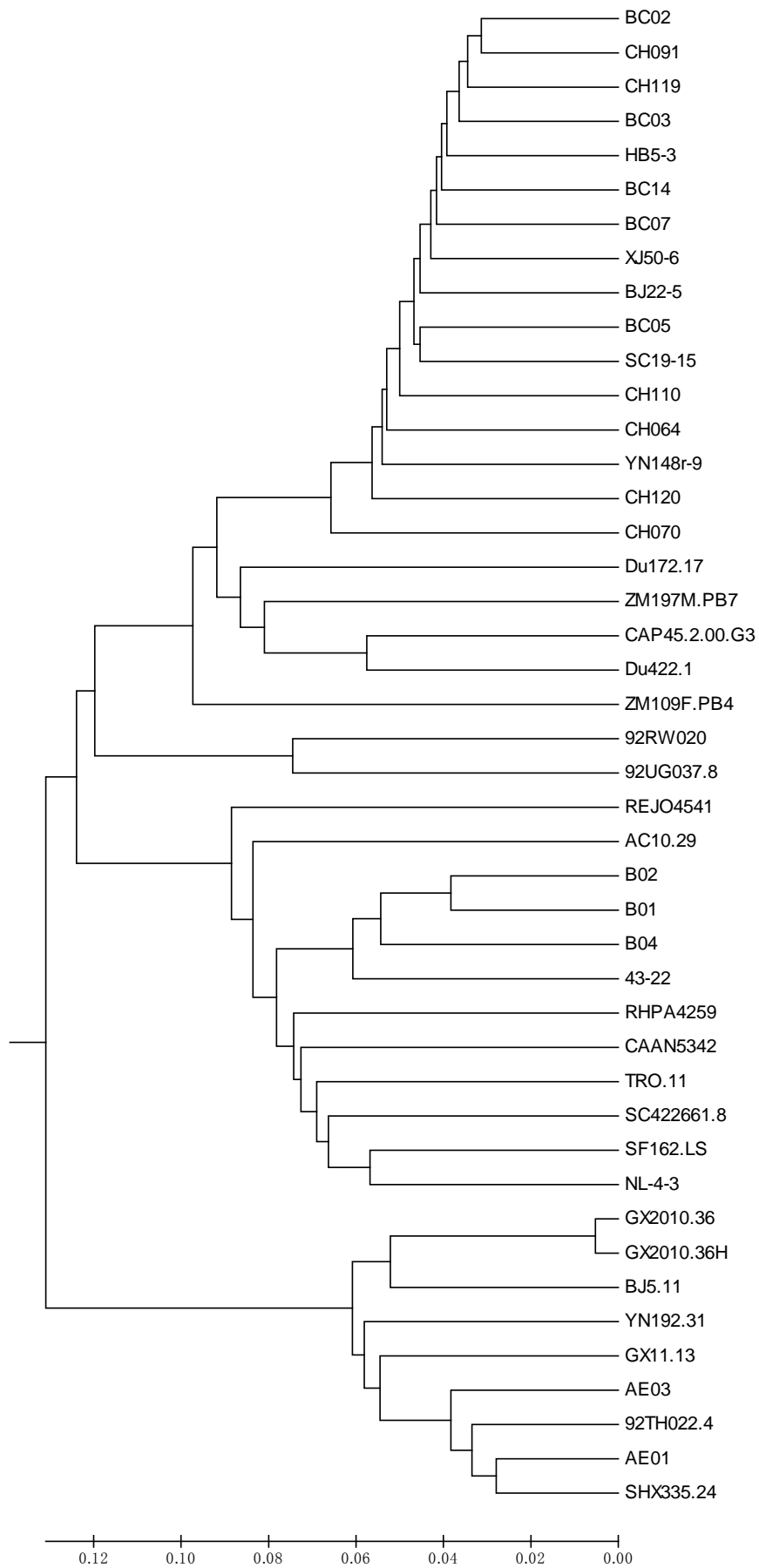


Fig. S2



Supplemental Table S1.

Table S1. Alignment of the NHR and CHR sequences of HIV-1 gp41

Pseudovirus	Accession no.	Clade	NHR sequence	CHR sequence
NL4-3	AF324493_8	B	QARQLLSDIV QQQNNLLRAI EAQQHLLQLT VWGIKQLQAR ILAVERYLKD QQLL	WMEWDREINN YTSLIHSLIE ESQNQEKNE QELLELDKWA SLWNWF
SF162. LS	EU123924	B	.....G..... V.....	...E...D...N...YT...
AC10. 0. 29	AY835446	B	...L...G..... V.....R.....	..Q....S.....YT...
TRO. 11	AY835445	B	...L...G.....M..... V.....R.....	...E...D...D...YI.L. K..I.....S.....
REJ04541	AY835449	B	.....G...S..... V..M.S.....	.R..EK..D...D...YT...K.....
RHPA4259	AY835447	B	...L...G...S..... V.....	..Q.E...D...D...YN.L. ....A.....S..
CAAN5342	AY835452	B	...L...G..... V..I.....	...EK..D...GI.YN.L. ....D...K.....T..
SC422661. 8	AY835441	B	...L...G..... V.....R.....	.....YN.L. DA.....
Du172. 17	DQ411853	C	.....G...S.....M.....T. V..I.....	..Q.....NT.Y..L. ....KD..A..S.E...S..
Du422. 1	DQ411854. 1	C	.....G...S.....T. V..I.....	..Q....S...NT.FR.L. D.....KD..A..S.K.N....
ZM197M. PB7	DQ388515. 1	C	.....G...S.....M.....T. V..I.....	..Q....D...QV.YQ.L. V.....ND..A...N...S..
ZM109F. PB4	AY424138. 2	C	.....G...S..... V..I...Q.....	..Q..K.VS...FT.YQ.L. ...Y...Q..K...A.N..N.D..S..
CAP45. 2. 00. G3	DQ435682. 1	C	.....G...S.....M.....T. V..I.....	.IQ....S...SNT.YK.L. G.....Q..KD..A..S.N.N....
92RW020	AY669706. 1	A	.....G...S.....M.K..... V.....	.LQ..K..S...QI.YN... ..D..A.....
92UG037. 8	U09127. 1	A	.V.K...G...S.....K..... V.....R.....	.LQ..K..S...HI.YE... ..K.....N.....
92TH022. 4	AY669778. 1	E	.....G...S.....X..M..... V.....KF.	.T..E...S...NQ.YEILT .....DR..KD.....
CH064	EF117254	B/C	H.....G...S.....T. V..I.....	..Q..K..S...A.YK.L. ...D.....KD..A..S.K.N....
CH070	EF117255	B/C	.....G.....K..... V..I.....	..Q..K... ..I.Y..L. D..I.....KD..A..S.N.N....
CH091	EF117256	B/C	.....G...S.....T. V..I.....	..Q..K..S...T.YR.L. D.....R..KD..A..S.K.N..S..
CH110	EF117257	B/C	.....G...S.....T. V..I.....	..Q..K..S...NT.YR.L. ....KD..A..S.K.N..S..
CH119	EF117261	B/C	.....G...S.....T. V..I.....	..Q..K..S...NT.YK.L. D.....S..KD..A..S.N.N....
CH120	EF117260	B/C	.....G...S...K.....T. V..I.....	..Q..K..S...NT.Y..L. ...I.....KD..A..S.K.N....
SC19-15	ADT65148	B/C	.....G...S.....T. V.....	..Q..K..S...NT.YR.L. D.....R..KD..A..S.K.N....
BJ22-5	ADT65144	B/C	.....G.....M.....T. V..I.....	..Q..K..S...DT.YR.L. V.....R..KD..A..S.K.N....

BC07	ABY71530	B/C	.....G...S.....H.....T. V..I....E ....	..Q.E...S. ..DT.YR.L. D.....R.. KD..A..S.N N.....
BC14	ABY71537	B/C	.....G...S...K... ..T. V..I.....	..Q..K... ..DI.YR.L. ...S...R.. KD..A..S.K N..S..
YN148r-9	ADT65158	B/C	.....G...S..... ..V..M.....	..Q..K..S. ..NT.YR.L. D.....R.. KD..A..S.Q N.....
XJ50-6	ADT65154	B/C	.....G...S..... ..T. V..I.....	..Q.EE..S. ...T.YR.L. KD..A..S.K N.....
HB5-3	ADT65143	B/C	.....G...S..... ..T. V..I...Q. ....	..Q..K..S. ..YT.YR.L. KD..A..S.K N.....
BC02	ABY71525	B/C	.....G...S..... ..T. V..I.....	..Q..K..S. ..NT.YR.L. D.....R.. KD..A..S.K N.....
BC03	ABY71526	B/C	.....G...S.....M.....T. V..I...R. ....	..Q..K..S. ..KT.YQ.L. D..Y...R.. KD..A..S.K N..S..
BC05	ABY71528	B/C	.....G...S..... ..T. V..M.....	..Q.....SK ..NT.YG.L. D.....R.. KD..A..S.K N..T..
B02	ABY71519	B'	.....G...R..... ..V.....	...E...D. ..RE.YT... ..L.....
43-22	CHH	B'	.....G...R..... ..V.....	...E...A. ..KE.YT... Q..... L..... S..
B01	ABY71518	B'	...M..G...R..... ..V.....	..Q.E..... ..RE.YA... ..L.....
B04	ABY71521	B'	.....G...R..... ..V.....	..Q.E...D. ..KE.YT... ..LD..K..E.. ..
SHX335. 24	ADD83190	A/E	.....G...S.....M.....V.....T..	..I..EK..S. ...Q.YKILT ...D..DR.. KD.....
YN192. 31	GU475046	A/E	.....G...S..... ..V.....Q. .KF.	..T..E...S. ..NK.YG.LT .....DR.. KD.....
AE03	ABY71544	A/E	.....G...S.....V.....V.....KF.	..I..E...S. ..NQ.YEILT .....D... KD.....T N.....
GX2010. 36	ADD83183	A/E	.....G...S.....K.....V.....N. .KF.	..T..E...S. ..DT.YQ.LT .....D... KD.....N.....
GX11. 13	GU475042	A/E	.....FG...S.....V.....V.....KF.	..T..E...S. ..NQ.YEILT .....DR.. KD.....
GX2010. 36H	GU475026. 1	A/E	.....G...S.....K.....V.....N. .KF.	..T..E...S. ..NT.YQ.LT .....D... KD.....
AE01	ABY71542	A/E	.....G...S..... ..V.....KF.	..I..E...S. ...Q.YEILT .....DR.. KD.....
BJ5. 11	ADD83181	A/E	.....G...S.....M.....V.....KF.	..I..EK..S. ..NK.YD.LT .....R.. KD.....
