

HIV1HXB2	MRVKEKYQHL	WRWGWRWGT	MLGMLM--IC	SATEKLWVTV	YYGVPVWKEA	TTTLFCASDA	KAYDTEVHNV	WATHACVPTD	[80]
HIV1TH023	.RTQMTWPN.	.K.-----T	.I.LVI--..	..SDN.....	-.....RD.	D-----..	..QE..A...	.....	[80]
HIV2ALI	.SSRNQ----	-----L	.VTI.LASA.	LVYC.QY...	F....A-.N.	SIP....TKN	RD-----	.G.IQ.L.-.	[80]
HIV1HXB2	PNPQEVVLVN	VTENFNMWKN	DMVEQMHEDI	ISLWDQSLKP	CVKLTPLCVS	LKCTDLKNDT	NTNSSSGRMI	ME-----	[160]
HIV1TH023	.....LH.E.	.....	-.....Q..V	.....	.....T	.N..NANVTN	VK.ITNVPN.	GNI-----	[160]
HIV2ALI	NDY..IA.-.	...A.DA.DT	--.TEQA..V	WR.FET.I..	.....-A	M..SNISTES	T.SP.P.STL	KPIESDPCIK	[160]
HIV1HXB2	-----KG	EIKNCSEFNIS	TSIRGKVQKE	YAFFYKLDII	--PIDNDTTS	YK--LTSCNT	SVITQACPKV	SFEPIPIHYC	[240]
HIV1TH023	-----TD	.VR.....MT	EL-.D.K..V	H.L.....V-	--.E.-SSK	.R--.IN...	...K.....I	..D.....	[240]
HIV2ALI	ADNCPRGLDE	.MV..R..MT	GLQ.D.PKQY	NETW.SK.VV	CE.FNTT.NQ	TRCYMNH...	....ES.D.H	YWDA.RFR..	[240]
HIV1HXB2	APAGFAILKC	NNKTFNGTGP	-CTNVSTVQC	THGIRPVVST	QLLLNGSLAE	EEVVIRSVNF	TDNAKTIIVQ	LNTSVEINCT	[320]
HIV1TH023	T.-.Y.....	.D.N.....	-K.-.S...	....K.A...	.....	..II...E.L	.N.....H	..K.....	[320]
HIV2ALI	..P.Y.L.R.	.DTNYS.FA.	N.SK.VAAT.	.RMMEMQT..	WFGF..TR..	NRTY.YWHG-	-RDNR...LN	KQYNLTMH.-	[320]
HIV1HXB2	RPNNNTRKRI	RIQRGPGRAF	VTIGKI-GNM	RQAHCNISRA	KWNNTLKQIA	SKLREQ----	--FGNNKTII	FKQSSGGDPE	[400]
HIV1TH023	..S....TS.	N.--...QV.	YRT.D.I.DI	.K.Y.E.NG.	...EV..KVT	E..K.H----	--.-----F	---PPS..L.	[400]
HIV2ALI	K.G.K.VVP.	TLMS.----L	FHSQP.NKRP	...W.WFKG-	E.REAMQEVK	ET.VKHPRYK	GTNDT.QINF	T.PGR.S.A.	[400]
HIV1HXB2	IVTHSFNCGG	EFFYCNSTQL	FNSTWFNSTW	STEGSNNTG	SDTITLPCRI	KQIINMWQKV	GKAMYAPPIS	GQIRCSSNIT	[480]
HIV1TH023	.M-.H...R.	..-...T.R.	..N.-----	----CMEN.T	MCG.I...K.	.....RA	.Q.....	.R.N.V....	[480]
HIV2ALI	E.-YMW.T.R.	.L-...M.WF	L.WV-----	----E.K.GQ	EQHNYA..H.	...T.H..	..NV.L.R-E	.ELT.-NTV.	[480]
HIV1HXB2	GLLLTRDGGN	SNNESEIFRP	GGGDMRDNR	SELYKYKVVK	IEPLGVAPTK	AKRRVVQREK	RAVGIGALFL	GFLGAAGSTM	[560]
HIV1TH023	.I.-.....-	L..TN.T...	...NIK....	.....Q	.....I...R	.....E...	.....MIF	.....-...	[560]
HIV2ALI	S.IANI.---	-TDQTIT.SA	EVAEL---Y.	L..GD...-E	.T.I.F.TSE	RRYSSTP.N.	---.VFV.L.	...AT...MT	[560]

HIV1HXB2	GAASMTLTVQ	ARQLLSGIVQ	QQNNLLRAIE	AQQHLLQLTV	WGIKQLQARI	LAVERYLKDQ	QLLGIWGCSG	KLICTTAVPW	[640]
HIV1TH023	..--I.....	.....	..S.....	.....	.....V	....--Y...	-K..L....-	-K.I.....	[640]
HIV2ALI	A.--L..A-	S.T..A....	--Q..DMV-	-K.QM.R...	...-N....V	-TI.K.....	AR.NS...AF	RQV.H.T...-	[640]
HIV1HXB2	NASWSNKSLE	QIWNHTTWME	WDREINNYTS	LIHSLIEESQ	NQQEKNEQEL	-LELDKWASL	WNWFNITNWL	WYIKLFIMIV	[720]
HIV1TH023	.ST...R.F.	E...NM..I.	.E...S...N	Q.YEILTQ..	...DR..KD.	.....-	---D...-	....I....-	[720]
HIV2ALI	---.V.N..K	PD.DNM..E.	--QQVRYLEA	N.SEQL.QA.	I.....TY..	K.SW.VFTN-	--.LDL.A-V	K..QYGVY.I	[720]
HIV1HXB2	GGLVGLRIVF	AVLSIVNRVR	QGYSPL----	-SFQTHLPTP	RGPDREPEGIE	EEGGERDRDR	SIRLVNGSLA	-LIWDDLRLS	[800]
HIV1TH023	...I....I.	.....	.....----	-.L.--ITHH	.E...-.R.-	.....QG..K	.V...S.F..	-.T.....	[800]
HIV2ALI	V.I.A....I	Y.-QMLS.L.	K..R.VFSSP	PGYIQQIHIIH	KDQE-----	QT.T.DVDNV	GD..WPWPI.	Y.HFHL.ALI	[800]
HIV1HXB2	CLFSYHRLRD	LLLIVTRIVE	LLGR-----R	GWEALKYWWN	LLQY---WSQ	E---LKNSAV	SLLNA--TAI	AVAEGTDRVI	[880]
HIV1TH023	.....-..	FIS.AA.T..	...HS-SKL.	...G...LG.	I.-.---.G.	-----I..I	-----	...-W.....	[880]
HIV2ALI	G.Y.IC.DLS	RFS.LQP.FQ	S.Q.ALTTI.	D.---RLKAA	Y...GCE.I.	.AFQFRIARE	T.T.TWRDLW	GAMQWVG.IL	[880]
HIV1HXB2	EVVQGACRAI	RHIPRRIRQG	LERILL	[906]					
HIV1TH023	..A...W...	L...-.....	...T..	[906]					
HIV2ALI	A-----	--V.....	A.IA..	[906]					

Figure S2- Alignment of the envelope sequences of HIV-1 HXB2 (subtype B), HIV-1 TH023 (CRF01_AE) and HIV-2 ALI. Alignment was performed with Muscle using default parameters in MEGA X. The chimeric gp120 produced in this work was based on the TH023 and ALI strains. The HIV-2 ALI C2V3C3 fragment present in the chimera is shown in red letters.