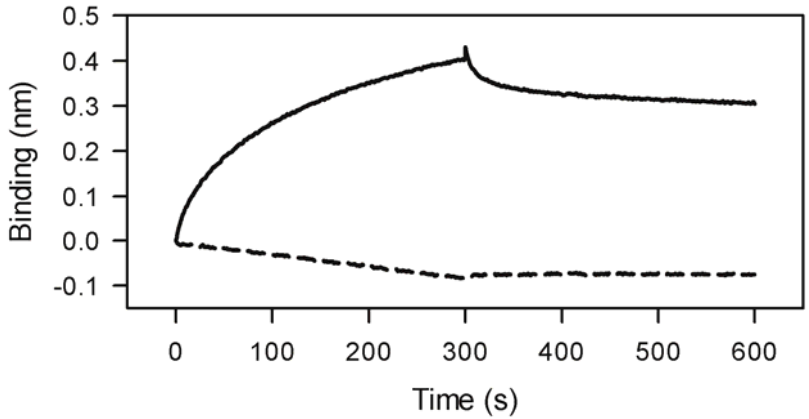

Figure S1: Optimal presentation of Galcer in liposome bilayer. Binding of anti-Galactocerebroside, a mouse monoclonal antibody (100 µg/ml) to Galcer liposomes (solid line) and POPC liposomes (dashed line) loaded onto Aminopropylsilane (APS) biosensors is shown. Galcer liposomes were made using a synthetic Galcer as mentioned in methods. Signal from anti-Galcer mAb binding to blank sensor was subtracted out to obtain the specific binding signal shown here.

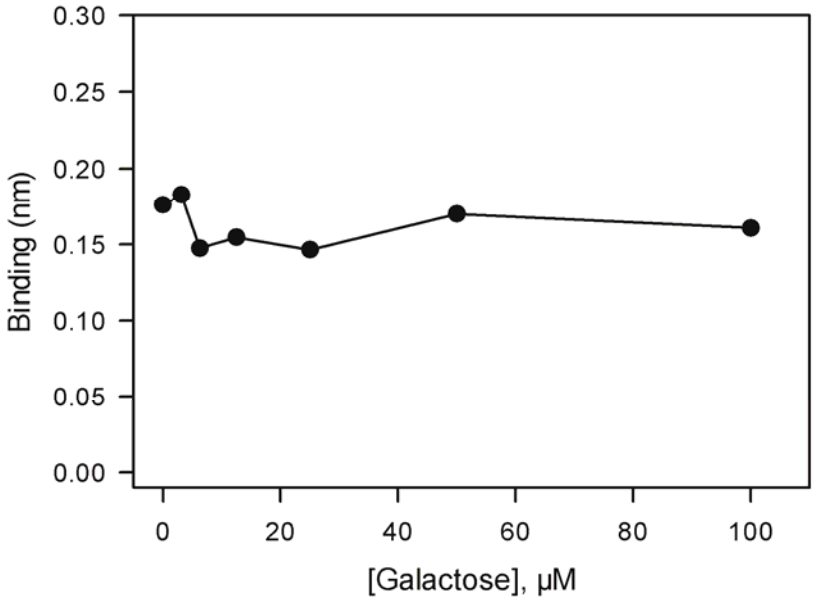

Figure S2: Galcer liposome binding of 1086.C gp140 in the presence of Galactose. Galcer liposome binding of 1086.C gp140 in the presence of increasing concentrations of Galactose is shown. The last 20 seconds of association phase of 1086C gp140 (50µg/ml)-Galcer liposome binding time courses at different concentrations of Galactose were averaged. The binding data shown is the average of two separate measurements.

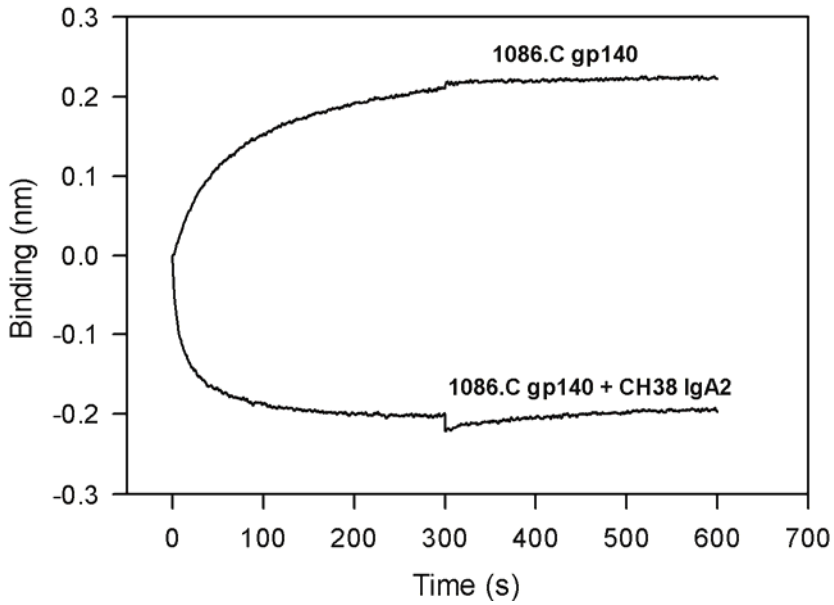

Figure S3: Blocking of A32 mAb binding of 1086.C gp140 by CH38 IgA2 mAb. The A32 mAb binding curves of 1086.C gp140 (50µg/ml) in the absence and in the presence of 3 molar excess of CH38 IgA2 mAb are compared. A32 mAb and Synagis mAb (negative control) were immobilized on amine reactive (AR2G) sensors. Binding of 1086.C gp140 (with and without CH38 IgA2) to Synagis immobilized sensors was subtracted out to obtain specific signal shown here.

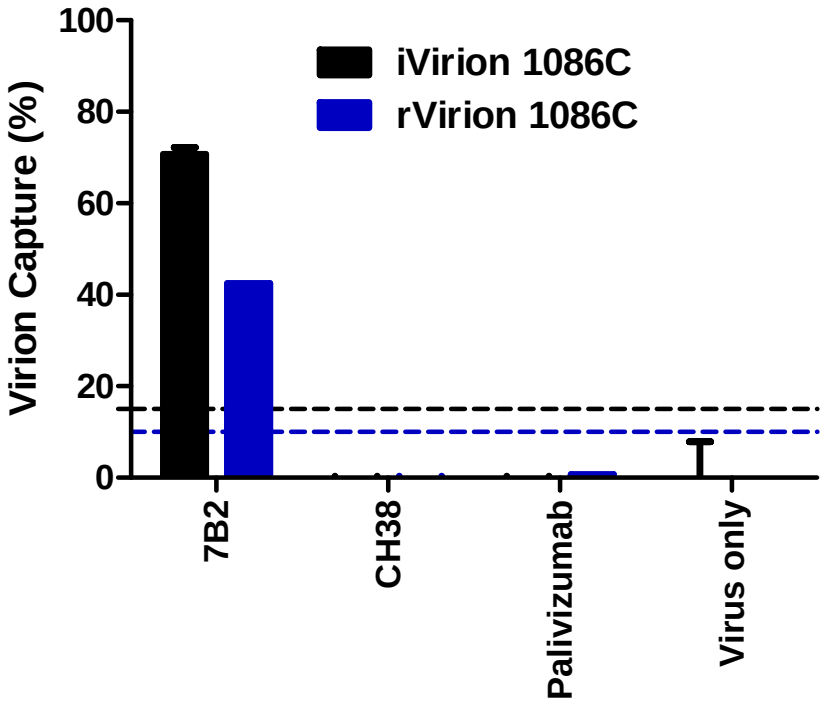

Figure S4: CH38 IgG does not capture HIV-1 Subtype C Ce1086 virus. The percent capture of 1086.C virions by CH38, 7B2 and Synagis (negative control) IgG antibodies are shown. The 1086.C virion-antibody immune complexes (IC) were made by mixing 10µg/ml of antibody with Ce1086. The IC were captured on a Protein G column. The percent virion capture was measured by determining infection of TZM-bl cells (iVirion, shown in black bars) and viral RNA using real time RT-PCR (rVirion, shown in blue bars) respectively. The error bar presents the standard deviation of data from replicates done in 3 wells. The dashed blue and black lines are the cutoff level for positive virion capture.

Table S1: Galcer binding of Envelope glycoprotein gp140 shown in Figure-2 is grouped according to HIV-1 clade.

Clade	HIV-1 Envelope glycoprotein	Galcer binding (nm)
A	VRC A 5304 gp140	5.3585e-3
A	OOMSA 4076 gp140	0.4379
A	A1 Con env 03 gp140CF	0.1863
B	VRC B 2801 gp140	0.0318
B	JRFL gp140 CF	0.2977
B	B Con env 03 gp140CF	0.1931
B	624008 TAS gp140C	0.0168
B	902114 B2 gp140C	0.0143
B	040 C9 gp140C	0.0322
B	63521 gp140	0.0288
B	6235714 D3 gp140C	0.1128
B	Mojo gp140C	0.1871
B	Fike gp140C	0.2188
C	DU123 gp140CF	0.2877
C	C con env 03 gp140CF	0.3200
C	089C gp140	0.0276
C	1086C gp140C	0.3262
AE	97CNG2XF 140CF	0.0764
AE	AE Con Env03 gp140CF	0.2635
G	DRCBL gp140	8.8836e-3
G	G Con env 03 gp140CF	0.2158