

## **SUPPLEMENTARY MATERIAL**

### **Structural Analysis of Glycosylated Intact HIV-1 gp120-b12 Antibody**

#### **Complex using Hydroxyl Radical Protein Footprinting**

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**Table S1**

<b>Glycosylation Site Identified</b>	<b>% Occupancy</b>
88	100 %
135	76%
138	36%
141	25%
156	38%
160	100%
187	100%
188	41%
234	42%
241	56%
262	56%
276	85%
295	70%
301	62%
332	74%
339	69%
356	100%
362	81%
386	79%
392	79%
397	79%
406	79%
448	78%
463	100%

## Figure S1

### Alignments of gp120 sequences with available crystal structures to JRFL used by Modeller to generate a homology model

```
>P1;9B4C
structureX:9B4C:84:G :127:G :::
-----VVLENVTEHFNMWKNDMVEQMEDIISLWDQSLKPCVK
LTPLCV-----
-----
-----
-----
-----*

>P1;2B4C
structureX:2B4C:195:G :492:G :::
-----S
CDTSVITQACPKISFEPIPIHYCAPAGFAILKCNCKTFNGKGPCKNVSTVQCTHGIRPVVSTQLLLNGSLAEEVVIRSD
NFTNNAKTIIVQLKESVEINCTRPNQNRKSIHIGPGRAFYTTGEIIGDIRQAHCNISRAKWNNTLKQIVIKLREQFENK
TIV-FNHSSGGDPEIVMHSFNCGGEFFYCNSAQLFNSTWNNNTEGSNNTEGNTITLPCRICKQIINMWQEVGKAMYAPPPIR
GQIRCSSNITGLLLTRDGGINENGTEIFRPGGDMRDNRSELYKYKVVVKIE--*

>P1;4NCO
structureX:4NCO:44:A :493:A :::
--VWKDAETTLFCASDAKAYETEKHNWATHACVPTDPNPQEIHLENVTEEFNWKNNMVEQMHTDIISLWDQSLKPCVK
LTPLCVTLQC-----TNVTNNITDDM-RGELKNCSFNMTTELDRKKQKVYSLFYR-----YRLIN
CNTSAITQACPKVSFEPIPIHYCAPAGFAILKCKDKKFNNGTGPCPSVSTVQCTHGIRPVVSTQLLLNGSLAEEVVMIRSE
NITNNAKNILVQFNTPVQINCTRPNNNRKSIHIGPGRAFYATGDIIGDIRQAHCNVSKATWNETLGKVVVKLRKHFNGN
TIIRFANSSGGDLEVTTHSFNCGGEFFYCNTSGLFNSTWISNT-----SVNDSITLPCRICKQIINMWQRIGQAMYAPPPIQ
GVIRCVSNITGLLLTRDGGSTNSTTETFRPGGDMRDNRSELYKYKVVVKIEP-*

>P1;4R4H
structureX:4R4H:47:A :83:A :::
-----EATTLFCASDAKAYDTEVHNWATHACVPTDPNPQE-----
-----
-----
-----
-----*

>P1;3JWD
structureX:3JWD:42:A :83:A :::
VPVWKEATTLFCASDAKAYDTEVHNWATHACVPTDPNPQE-----
-----
-----
-----
-----*

>P1;4TVP
structureX:4TVP:126:G :132:G :::
----CVTLQCT-----
-----
-----
-----
-----*

>P1;4TVP
structureX:4TVP:150:G :194:G :::
-----M-RGELKNCSFNMTTELDRKKQKVYSLFYRLDVVQIN-----SNKEYRLI-
-----
-----
-----
-----*

>P1;4HPO
structureX:4HPO:167:P :181:P :::
-----DKKQKVHALFYKLDI-----
-----
-----
-----
-----*
```

>P1;JRFL  
sequence:JRFL:::::0.00:0.00  
VPVWKEATTLFCASDAKAYDTEVHNWVATHACVPTDPNPQEVVLENVTEHFNWKNMVEQMQEDIISLWDQSLKPCVK  
LTPLCVTLNCKDVNATNTNDSEGTMERGEIKNCSFNITTSIRDEVQKEYALFYKLDVVPI-----DNNNTSYRLIS  
CDTSVITQACPKISFEPIPIHYCAPAGFAILKCNDKTFNGKGPCKNVSTVQCTHGIRPVVSTQLLLNGSLAEEEVVIRSD  
NFTNNAKTIIVQLKESVEINCTRPNNNRKSIHIGPGRAFYTTGEIIGDIRQAHCNISRAKWNNTLQIIVIKLREQFENK  
TIV-FNHSSGGDPEIVMHSFNCGGEFFYCNSTQLFNSTWNNNTEGSNTEGNTITLPCRKQIINMWQEVGKAMYAPP  
IR  
GQIRCSSNITGLLLTRDGGINENGTEIFRPGGGDMRDNRSELYKYKVVKIEPL\*