

gp120 (isolate HXB2) (HIV-1/Clade B)

CATALOG NUMBER: IV-0022-005P, 50 µg

Introduction	Envelope glycoprotein GP120 (or gp120) is a glycoprotein exposed on the surface of the HIV envelope. The 120 in its name comes from its molecular weight of 120. Gp120 is essential for virus entry into cells as it plays a vital role in attachment to specific cell surface receptors. These receptors are DC-SIGN, Heparan Sulfate Proteoglycan and a specific interaction with the CD4 receptor, particularly on helper T-cells. Binding to CD4 induces the start of a cascade of conformational changes in gp120 and gp41 that lead to the fusion of the viral with the host cell membrane. Binding to CD4 is mainly electrostatic although there are van der Waals interactions and hydrogen bonds.
Applications	Western blot standard, antibody ELISA, HIV-1 entry inhibition, <i>etc.</i>
Description	6xHis tagged HIV-1 gp120 (HXBc2) (Clade B) protein (amino acid 34-518) (Genbank No. K03455), expressed and purified from HEK 293 cells
Storage	Long term storage at -20 °C or -70 °C; Stable for 3 months from the date of shipment when kept at 4 °C.
Endotoxin Level	<0.01 EU per 1 µg of the protein by LAL test
Concentration	1 ug/ul in PBS
Purity	≥ 95% purity (SDS PAGE).



SDS-PAGE: purified HIV-1 gp120 (HXBc2) (Clade B) protein

HIV-1 gp120 (HXBc2)(Clade B) Protein SEQ:

WVTVYYGVVPVWKEATTTLFCASDAKAYDTEVHNWVATHACVPTDPNPQEVVVLVNVVTENFNMWKNMVEQMHEDIISLWDQSLKPC
 VKLTPLCVSLKCTDLKNDTNTNSSGRMIMEKGEIKNCSFNISTSIRGKVQKEYAFFYKLDIIPIDNDTTSYKLTSCNTSVITQA
 CPKVSFEPIPIHYCAPAGFAILKCNKTFNGTGPCTNVSTVQCTHGIRPVVSTQQLLNGSLAEEVVIRSVNFTDNAKTIIVQLN
 TSVEINCTRPNNTRKRIRIQRGPGRAFVTIGKIGNMRQAHCNISRAKWNNTLKQIASKLREQFGNNKTIIFKQSSGGDPEIVTH
 SFNCGGEFFYCNSTQLFNSTWFNSTWSTEGSNNTSGSDTITLPCRIKQIINMWQKVGKAMYAPPISGQIRCSSNITGLLLTRDGG
 NSNNESEIFRPGGGMDRDNWRSELYKYKVVVIEPLGVAPTAKARRVVQREKRAVGHHHHHH

