

Recombinant HIV-1 gp120, His-tagged

Cat. No. env-22H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the HIV-1 envelope glycoprotein gp160 extracellular domain (Tyr38-Arg527), termed as gp120, was expressed with a polyhistidine tag at the C-terminus.
Species	HIV
Source	Human Cells
ProteinLength	38-527 a.a.
Description	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.
Predicted N Terminal	Tyr 38
Form	Lyophilized from sterile PBS, pH 7.4
Molecular Mass	The recombinant HIV1 gp120(group P) consists 501 amino acids and predicts a

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	molecular mass of 56.2 kDa.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method
Purity	> 90 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70°C
Storage	Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

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