Catalog # GP0-V52H3



#### Source

Human immunodeficiency virus 1 gp140 Protein, His Tag (GP0-V52H3) is expressed from human 293 cells (HEK293). Predicted N-terminus: Ala 30

## **Molecular Characterization**

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 53.7 kDa & 19.3 kDa. The protein migrates as 110-120 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

#### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in 0.1 M Sodium citrate, pH5.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

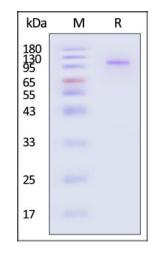
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

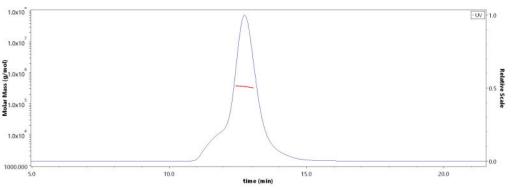
- -20°C to -70°C for 12 months in lyophilized state;
- $70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human immunodeficiency virus 1 gp140 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u>).

# SEC-MALS



The purity of Human immunodeficiency virus 1 gp140 Protein, His Tag (Cat. No. GP0-V52H3) is more than 85% and the molecular weight of this protein is around 330-370 kDa verified by SEC-MALS. <u>Report</u>

## **Bioactivity-ELISA**

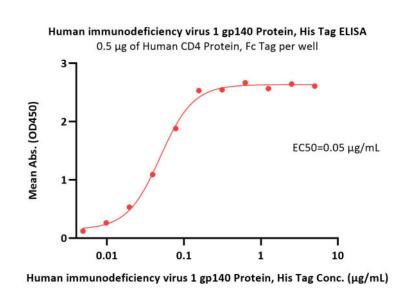


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Catalog # GP0-V52H3



Immobilized Human CD4 Protein, Fc Tag (Cat. No. CD4-H5259) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human immunodeficiency virus 1 gp140 Protein, His Tag (Cat. No. GP0-V52H3) with a linear range of 0.005-0.156  $\mu$ g/mL (QC tested).

# Background

The trimeric envelope glycoproteins (Env) that are displayed on human and simian immunodeficiency viruses (HIV and SIV, respectively) are heterodimers of the transmembrane glycoprotein (gp41) and a surface glycoprotein (gp120). The glycoproteins gp120 and gp41 are synthesized initially as a single gp160 polypeptide that is subsequently cleaved to generate the noncovalently associated gp120/gp41 complex. Soluble versions of trimeric gp140, either cleaved or uncleaved, are being developed as immunogens to elicit a protective humoral immune response against HIV-1 infection.

# **Clinical and Translational Updates**



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