

## Recombinant Human Immunodeficiency Virus Type 1 Glycoprotein gp120(R2)(Clade B), His-tagged

DAG2106 HIV

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	6xHis tagged HIV-1 gp120(R2)(Clade B) protein (a.a.41-520) (Genebank No. AF128126).
<b>Antigen Description</b>	The HIV-1 surface protein gp120, also known as Glycoprotein 120, SU, and gp120 is not anchored to the viral envelope, but associates with the extravirion surface through its binding to TM. The surface protein gp120 attaches the virus to the host lymphoid cell by binding to the primary receptor CD4. This interaction induces a structural rearrangement creating a high affinity binding site for a chemokine coreceptor like CXCR4 and/or CCR5. Surface protein gp120 is a ligand for CD209 / DC-SIGN and CLEC4M / DC-SIGNR. It may target the virus to gut-associated lymphoid tissue (GALT) by binding host ITGA4/ITGB7 (alpha-4/beta-7 integrins), a complex that mediates T-cell migration to the GALT. Interaction between gp120 and ITGA4/ITGB7 would allow the virus to enter GALT early in the infection, infecting and killing most of GALT's resting CD4+ T-cells. This T-cell depletion is believed to be the major insult to the host immune system leading to AIDS.
<b>Source</b>	HEK293 cells
<b>Species</b>	HIV
<b>Tag</b>	His
<b>Form</b>	Each vial contains 100 µg purified protein in PBS containing 25% glycerol.
<b>AA Sequence</b>	a.a.41-520
<b>Purity</b>	>= 95%
<b>Applications</b>	WB, etc

### PACKAGING

<b>Storage</b>	Store at 4°C; DO NOT FREEZE; stable for 1 year from the date of shipment. Non-hazardous. No MSDS required
<b>Concentration</b>	1 mg/ml
<b>Dilutions</b>	N/A

### BACKGROUND

<b>Introduction</b>	Human immunodeficiency virus (HIV) is a lentivirus (a member of the retrovirus family) that causes acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells. The four major routes of transmission are unsafe sex, contaminated needles, breast milk, and transmission from an infected mother to her baby at birth (perinatal transmission). Screening of blood products for HIV has largely eliminated transmission through blood transfusions or infected blood products in the developed world.
<b>Keywords</b>	HIV-1 gp120; HIV1 gp120; Envelope surface glycoprotein gp120; Glycoprotein 120; gp120; gp120 glycoprotein; Human Immunodeficiency Virus 1; SU; Surface protein; Retroviridae; Lentivirus; human immunodeficiency virus

### REFERENCES

1. Julie Yamaguchi, Ruthie Coffey, Ana Vallari, Charlotte Ngansop, Dora Mbanya, Nicaise Ndembi, Lazare Kaptué, Lutz G. Gürtler, Pierre Bodelle, Gerald Schochetman, Sushil G. Devare, Catherine A. Brennan (January 2006). "Identification of HIV Type 1 Group N Infections in a Husband and Wife in Cameroon: Viral Genome Sequences Provide Evidence for Horizontal Transmission". *AIDS Research and Human Retroviruses* 22 (1): 83–92.
2. Peeters M, Gueye A, Mboup S, Bibollet-Ruche F, Ekaza E, Mulanga C, Ouedrago R, Gandji R, Mpele P, Dibanga G, Koumare B, Saidou M, Esu-Williams E, Lombart JP, Badombena W, Luo N, Vanden Haesevelde M, Delaporte E (March 1997).
3. "Geographical distribution of HIV-1 group O viruses in Africa". *AIDS* 11 (4): 493–8. Plantier JC, Leoz M, Dickerson JE, De Oliveira F, Cordonnier F, Lemée V, Damond F, Robertson DL, Simon F (August 2009). "A new human immunodeficiency virus derived from gorillas". *Nature Medicine* 15 (8): 871–2.

---

## IMAGES