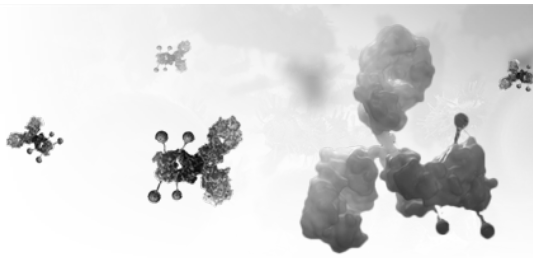

Recombinant HIV type 1 (Clade A) Glycoprotein 140 (a.a. 24-680) [His] (DAG2129)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	6xHis tagged HIV-1 gp140(Clade A) protein (a.a.24-680)
Antigen Description	Human Immunodeficiency Virus (HIV) can be divided into two major types, HIV type 1 (HIV-1) and HIV type 2 (HIV-2). HIV-1 is related to viruses found in chimpanzees and gorillas living in western Africa. HIV-2 is related to viruses found in sooty mangabeys. HIV-1 viruses may be further divided into groups. The HIV-1 group M viruses predominate and are responsible for the AIDS pandemic. Some of the HIV-1 group M subtypes are known to be more virulent or are resistant to different medications. HIV-2 viruses are thought to be less virulent and transmissible than HIV-1 M group viruses.The HIV-1 envelope glycoprotein gp160, also known as Glycoprotein 160, is cleaved into two chains: the surface protein gp120 and the transmembrane protein gp41. The mature envelope protein (Env) consists of a homotrimer of non-covalently associated gp120-gp41 heterodimers. 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. The transmembrane protein gp41 (TM) acts as a class I viral fusion protein, and membranes fusion leads to delivery of the nucleocapsid into the cytoplasm. The external domains of the HIV-1 envelope glycoprotein (gp120 and the gp41 ectodomain, collectively known as gp140) contain all known viral neutralization epitopes.
Species	HIV
Purity	≥ 95%
Conjugate	His
Applications	WB, etc

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Format	Each vial contains 100 µg purified protein in PBS containing 0.1% BSA and 25% glycerol.
Concentration	1 mg/ml
Size	100 µg, 1 mg
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	The human immunodeficiency virus (HIV) is a lentivirus (slowly replicating retrovirus) that causes the 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. Without treatment, average survival time after infection with HIV is estimated to be 9 to 11 years, depending on the HIV subtype. 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.
Keywords	HIV-1 gp140; HIV1 gp140; Envelope surface glycoprotein gp140; Glycoprotein 140; gp140; gp140 glycoprotein; Human Immunodeficiency Virus 1; SU; Surface protein; Retroviridae; Lentivirus; human immunodeficiency virus; HIV1 gp140; human immunodeficiency viru

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