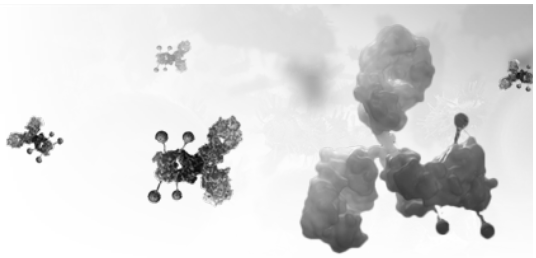

Recombinant HIV type 1 (LAV) Glycoprotein 120 (DAG1535)

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

PRODUCT INFORMATION

Product Overview	HIV-1 gp120 LAV isolate Recombinant- is the external envelope protein, full-length 100-120 kDa, derived from the env. gene of HIV-1 and glycosylated with N-linked sugars and produced using baculovirus vectors in insect cells. Purified under conditions tha
Antigen Description	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.
Species	HIV
Purity	Greater than 90.0% as determined by HPLC analysis and SDS-PAGE.
Conjugate	Unconjugated
Applications	HIV-1 gp120 antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.
Format	Sterile filtered colorless clear solution.
Size	10 µg, 100 µg
Buffer	10mM Tris-Cl pH-7.6, 150mM NaCl and 0.01% Triton N-101.

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Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	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.
Keywords	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

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