

Recombinant Human Immunodeficiency Virus Type 1 p24(Clade B)(HXBc2), His-tagged

Cat.No:DAG2376

Lot. No. (See product label)

PRODUCT INFORMATION

species	HIV
Applications	WB standard, antibody ELISA, immunogen, etc
Storage	Store at 4°C; DO NOT FREEZE; stable for 1 year from the date of shipment. Non-hazardous. No MSDS required
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. Gag protein from HIV-1 is a polyprotein, which, during viral maturation, is cleaved to release matrix p17, core p24 and nucleocapsid proteins. Capsid protein p24 forms the conical core that encapsulates the genomic RNA-nucleocapsid complex in the virion. Most core are conical, with only 7% tubular. The core is constituted by capsid protein hexamer subunits. The core is disassembled soon after virion entry. The p24 antigen contains epitopes that prime helper CD4 T-cells, which have been demonstrated to be protective and it can elicit lymphocyte proliferation. p24 is likely to be an integral part of any multicomponent HIV vaccine.
Concentration	1 mg/ml
Source	E. coli
Tag	His
Form	Each vial contains 100 µg of lyophilized protein in PBS.
Purity	>= 95%
Dilutions	Add 0.1 ml of ultrapure H2O to after receiving. Spin briefly before reconstitution.

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 gp24; HIV1 gp24; Envelope surface glycoprotein gp24; Glycoprotein 24; gp24; gp24 glycoprotein; Human Immunodeficiency Virus 1; SU; Surface protein; Retroviridae; Lentivirus; human immunodeficiency virus