

Recombinant Human Immunodeficiency Virus Integrase P31 (a.a. 9-289), His-tagged

Cat.No:DAG485

Lot. No. (See product label)

PRODUCT INFORMATION

Storage	Short term (up to 2 months) store at 2-8oC. Long term, aliquot and store at -80oC. Avoid multiple reeze/thaw cycles.
Antigen Description	Integrase is an enzyme, a product of the HIV1 Gag/Pol gene; the other two enzymes being reverse transcriptase and protease. The human immunodeficiency virus (HIV-1) uses an enzyme, a so-called integrase, to carry out the integration of its viral DNA into the host chromosome thereby tricking the host cell machinery into making viral proteins. The HIV-1 integrase is a protein of 32 kDa and is composed of three domains. No cellular homologue of HIV integrase has been described, so potential inhibitors to this enzyme could be relatively nontoxic.
Source	E. coli.
Buffer	1.5M urea, 25mM Tris-HCl, pH 8.0 containing 0.02% Triton-X and 50% glycerol
Concentration	Lot specific
Applications	Suitable for use in ELISA, Western blot and Lateral flow. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Form	Purified, Liquid
Preservative	None
Purity	>95% pure (SDS-PAGE)
Key words	HIV; IN; Human immunodeficiency virus Integrase p31; Human immunodeficiency virus 1; Integrase; p31; Integrase p31; HIV Integrase p31; Retroviridae; Lentivirus

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.