



Recombinant HIV type 1 Integrase Protein [His] (DAG2728)

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

PRODUCT INFORMATION

Product Overview

The *E. coli* derived 26 kDa recombinant protein is a non-glycosylated polypeptide chain, containing the HIV-1 immunodominant regions from the pol protein (integrase) and fused with six histidines at the Nterminus.

Antigen Description

Integrase is an enzyme produced by the HIV which enables its genetic material to be integrated into the DNA of the infected cell and is a key component in the pre-integration complex. HIV integrase contains 3 domains, an N-terminal HH-CC zinc finger domain which is partially responsible for multimerization, a central catalytic domain and a C-terminal domain. Both Central catalytic domain and C-terminal domains have been shown to bind both viral and cellular DNA. No crystal structure data exists with Integrase bound to its DNA substrates. HIV-1 integrase functions as a dimer or a tetramer. Additionally, several host cellular proteins interact with integrase and may facilitate the integration process

Specificity

Immunoreactive with all sera of HIV-1 infected individuals

Species

HIV

Purity

Greater than 95. 0% as determined by HPLC analysis and SDS-PAGE.

Conjugate

His

Applications

HIV-1 Integrase antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroConvertors with minimal specificity problems.

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; Human Immunodeficiency virus 1; IN; Integrase; HIV1 integrase