



Recombinant HIV type 1 P24 Protein (a.a. 77-436) [Biotin, beta-galactosidase] (DAG1519)

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

PRODUCT INFORMATION

Product Overview

The E.coli derived 39 kDa biotin labeled recombinant protein is a non-glycosylated polypeptide chain, containing the HIV-1 p24 immunodominant regions, amino acids 77-436. The HIV-1 p24 Biotinylated is fused to beta-galactosidase (114 kDa) at the N-terminus

Antigen Description

HIV1 performs highly complex orchestrated tasks during the assembly, budding, maturation and infection stages of the viral replication cycle. During viral assembly, the proteins form membrane associations and self-associations that ultimately result in budding of an immature virion from the infected cell. Gag precursors also function during viral assembly to selectively bind and package two plus strands of genomic RNA. Capsid protein p24 probably forms the conical core of the virus that encapsulates the genomic RNA-nucleocapsid complex.

Species

HIV

Purity

Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.

Conjugate

Biotin, Beta-galactosidase

Applications

HIV-1 p24 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

100 µg

Buffer

8M Urea, 20mM Tris-HCl pH 8.0, 10mM mercaptoethanol.

Preservative

None

Storage

2-8°C short term, -20°C long term

BACKGROUND

Introduction

The human immunodeficiency virus (HIV) is a lentivirus (a subgroup of 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 P24; Human immunodeficiency virus P24