



# 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

<b>Product Overview</b>	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
<b>Antigen Description</b>	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.
<b>Species</b>	HIV
<b>Purity</b>	Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.
<b>Conjugate</b>	Biotin, Beta-galactosidase
<b>Applications</b>	HIV-1 p24 antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.
<b>Format</b>	Sterile filtered colorless clear solution.
<b>Size</b>	100 µg
<b>Buffer</b>	8M Urea, 20mM Tris-HCl pH 8.0, 10mM mercaptoethanol.
<b>Preservative</b>	None
<b>Storage</b>	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