

HIV-1 p55 gag Human Immunodeficiency Virus 1 Antigen recombinant, Baculovirus

Cat. No.	Amount
PR-1217	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 10 mM Tris-HCl pH 8.0, 140 mM NaCl and 400 mM L-Arginine.
For long time storage add a carrier protein like 0.1% BSA.

Application

Antigen in ELISA and Western blots, excellent antigen for detection of HIV seroconvertors with minimal specificity problems.

Specificity

Immunoreactive with sera of HIV-infected individuals.

Molecular Weight

55 kDa

Purity

>90% by SDS-PAGE and HPLC

Description

Recombinant HIV-1 p55 gag is glycosylated with N-linked sugars and produced in insect cells.
Recombinant HIV-1 p55 is purified by proprietary chromatographic technique.

Background

HIV belongs to the retrovirus family, distinguished by possession of a viral reverse transcriptase that transcribes viral RNA into DNA which is integrated into the host-cell genome.

p55 is a precursor protein, which is processed to p17 (matrix), p24 (capsid), p7 (nucleocapsid), and p6 proteins by the viral protease. It is called 'assemblin' to indicate its role in viral assembly.

Selected References:

- Ivanov *et al.* (2001) Sup35p yeast prion-like protein as an adapter for production of the Gag-p55 antigen of HIV-1 and the L-chain of botulinum neurotoxin in *Saccharomyces cerevisiae*. *Res. Microbiol.* **152**:27.
- Neidleman *et al.* (2000) Genetically detoxified mutants of heat-labile enterotoxin from *Escherichia coli* are effective adjuvants for induction of cytotoxic T-cell responses against HIV-1 gag-p55. *Immunology* **101**:154.
- Kazzaz *et al.* (2000) Novel anionic microparticles are a potent adjuvant for the induction of cytotoxic T lymphocytes against recombinant p55 gag from HIV-1. *J. Control. Release* **67**:347.
- Bristow *et al.* (1999) Human cyclophilin has a significantly higher affinity for HIV-1 recombinant p55 than p24. *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.* **20**:334.
- Jakobsen *et al.* (1998) Increased levels of soluble tumour necrosis factor receptor-1 (P55) and decreased IgG1 reactivities in HIV-1 patients with cytomegalovirus disease. *Scand. J. Immunol.* **47**:591.
- McAdam *et al.* (1998) Cross-clade recognition of p55 by cytotoxic T lymphocytes in HIV-1 infection. *AIDS* **12**:571.