



HIV-1 Integrase p31

Human Immunodeficiency Virus 1 Integrase recombinant, *E. coli*

Cat. No.	Amount
PR-1267	100 µg

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 32 kDa

Purity: > 95 % (SDS-PAGE, HPLC)

Form: liquid (Supplied in 25 mM Tris-HCl pH 8.0, 1.5 M urea, 0.2% Triton-X and 50% glycerol)

Applications:

May be used in ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

Description:

The *E. coli* derived recombinant protein is a non-glycosylated polypeptide chain, containing the HIV-1 immunodominant regions from the p31 protein (integrase) 9-289 amino acids, fused with a GST tag at N-terminus. 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. The human immunodeficiency virus (HIV) integrase (IN), one of the three virally encoded enzymes required for HIV-1 replication, must covalently join the viral cDNA into a host chromosome for productive HIV infection.

Specificity: Immunoreactive with all sera of HIV-1 infected individuals.

Selected References:

Payan *et al.* (2003) [Measuring the HIV viral load with LCx (Abbott): importance for the therapeutic follow-up of 3 patients infected by type O HIV]. *Transfus. Clin. Biol.* **10**:72.

Andreola (2004) Closely related antiretroviral agents as inhibitors of two HIV-1 enzymes, ribonuclease H and integrase: killing two birds with one stone. *Curr. Pharm. Des.* **10**:3713.

Sechi *et al.* (2004) Design and synthesis of novel indole beta-diketo acid derivatives as HIV-1 integrase inhibitors. *J. Med. Chem.* **47**:5298.

Reinke *et al.* (2004) L-chicoric acid inhibits human immunodeficiency virus type 1 integration *in vivo* and is a noncompetitive but reversible inhibitor of HIV-1 integrase *in vitro*. *Virology* **326**:203.

Hazuda *et al.* (2004) A naphthyridine carboxamide provides evidence for discordant resistance between mechanistically identical inhibitors of HIV-1 integrase. *Proc. Natl. Acad. Sci. USA* **101**:11233.

Aiello *et al.* (2004) Synthesis of novel thiazolothiazepine based HIV-1 integrase inhibitors. *Bioorg. Med. Chem.* **12**:4459.

Mousnier *et al.* (2004) Nuclear import of HIV-1 integrase is inhibited *in vitro* by styrylquinoline derivatives. *Mol. Pharmacol.* **66**:783.