

HIV-2 RT

Human Immunodeficiency Virus2 Reverse Transcriptase recombinant, *E. coli*

Cat. No.	Amount
PR-352	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 7.8, 1 mM DTT, 1 mM EDTA, 15 % glycerol and 0.2% BSA.

Activity

10.000 U/mg (1 unit is defined as the amount of enzyme that incorporates 1.0 nmol of dTTP into acid-insoluble products in 10 min at 37°C).

Purity

>95% by SDS-PAGE

Description

HIV-2 reverse transcriptase (RT) is used by the Human Immunodeficiency Virus-1 to transcribe its RNA genome into single-stranded DNA. HIV-2 RT can be used for incorporation of nucleotide analogs into DNA by RT-PCR or as a standard for assaying HIV-2 RT activity in human serum. In contrast to HIV-1 RT, HIV-2 RT is not inhibited by nonnucleoside RT inhibitors (NNRTI's).

Selected References:

- Gleenberg *et al.* (2005) Peptides derived from the reverse transcriptase of human immunodeficiency virus type 1 as novel inhibitors of the viral integrase. *J. Biol. Chem.* **280**:21987.
- Pata *et al.* (2002) Assembly, purification and crystallization of an active HIV-1 reverse transcriptase initiation complex. *Nucl. Acids Res.* **30**:4855.
- Divita *et al.* (1995) Dimerization Kinetics of HIV-1 and HIV-2 Reverse Transcriptase - A two step process. *J. Mol. Biol.* **245**:508.
- Mansky *et al.* (2002) Influence of reverse transcriptase variants, drugs, and Vpr on human immunodeficiency virus type 1 mutant frequencies. *J. Virol.* **77**:2071.
- Larder *et al.* (1999) Closing in on HIV drug resistance. *Nature Structural Biology* **6**:103.
- Ren *et al.* (2002) Structure of HIV-2 reverse transcriptase at 2.35 Å resolution and the mechanism of resistance to non-nucleoside inhibitors. *PNAS* **99**:14410.