

Product datasheet

Recombinant HIV1 Reverse Transcriptase protein (Active) ab63979

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Description

Product name	Recombinant HIV1 Reverse Transcriptase protein (Active)
Biological activity	5,000 units/ml. Definition of activity: Activity of 1 nanomole intake of dTMP in 10 min is considered 1 unit with poly(rA) and oligo(dT) as template and primer at 37°C.
Purity	> 90 % SDS-PAGE. (CBB staining) Fractionated by step-wise ammonium sulfate precipitation.
Expression system	Escherichia coli
Accession	<u>P04585</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	HIV-1
Additional sequence information	Composed of two subunits whose molecular weights are 66 kD and 51 kD, same as the those of the enzyme purified from AIDS virus particles. (GenBank AAA44988.1)

Specifications

Our **Abpromise guarantee** covers the use of **ab63979** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA SDS-PAGE Functional Studies Western blot
Form	Liquid
Additional notes	ab63979 has been derived from infectious plasmid clone pNL4-3 and belongs to Group B of HIV-1. Applications: 1) It is extremely effective for screening new specific inhibitors for HIV virus as a drug for treating

AIDS.

2) Generally, Gag and Env proteins are employed as antigens for detecting anti-HIV-1 antibody. However, by using this enzyme in combination as an antigen, the detection will be more sensitive.

3) Reverse transcriptases are used in the first step of RT-PCR reaction for converting RNA to DNA. The HIV-1 reverse transcriptase can also be applied for RT-PCR method.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

pH: 6

Constituents: 0.1% Triton-X-100, 0.05% Magnesium chloride, 0.63% Tris HCl, 50% Glycerol, 0.29% Sodium chloride, 0.0154% DTT

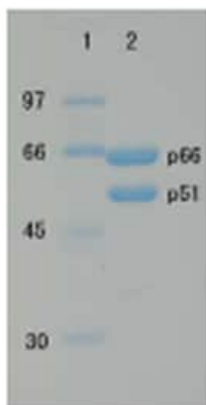
This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Relevance

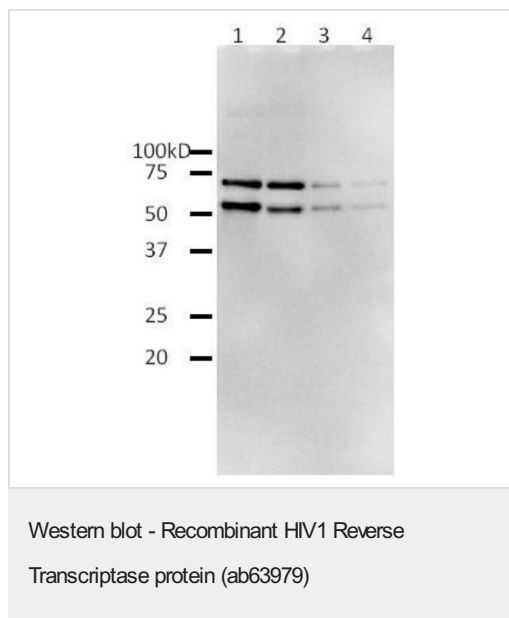
HIV1 Reverse Transcriptase is an RNA-dependent DNA polymerase of HIV1 (AIDS virus), subtype B origin. It is responsible for the production of a double stranded DNA copy of the single stranded RNA genome that is contained in the HIV1 virus particle and primed by the host cell lysine-tRNA which partly unfolds and anneals to the 5' end of the viral genomic RNA. This is extended by the polymerase function of RT to give a DNA-RNA hybrid. It also has RNaseH activity which degrades the RNA component of this hybrid once it has been copied.

Images



Polyacrylamide gel electrophoresis of ab63979.

SDS-PAGE - Recombinant HIV1 Reverse
Transcriptase protein (ab63979)



All lanes : Anti-HIV1 Reverse Transcriptase antibody [39/4.12.2] (**ab9066**) at 1/2000 dilution

Lane 1 : Recombinant HIV1 Reverse Transcriptase protein (Active) (ab63979) at 0.04 µg

Lane 2 : Recombinant HIV1 Reverse Transcriptase protein (Active) (ab63979) at 0.02 µg

Lane 3 : Recombinant HIV1 Reverse Transcriptase protein (Active) (ab63979) at 0.004 µg

Lane 4 : Recombinant HIV1 Reverse Transcriptase protein (Active) (ab63979) at 0.002 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab6721**) at 1/5000 dilution

Developed using the ECL technique.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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