



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	HIV-1 p51 Reverse Transcriptase Recombinant Protein
<b>Catalog Number:</b>	2896
<b>Lot Number:</b>	150129
<b>Provided:</b>	25 µg (1 mg/ml)
<b>Molecular Weight:</b>	51 kDa.
<b>Purity:</b>	95%+ by Coomassie Blue and silver staining. Integrity determined immunologically with anti-RT antibodies. Protein is weakly active as a DNA polymerase if salt is reduced from standard RT assay buffer.
<b>Description:</b>	This is the 51 kDa subunit for HIV-1 HXB2 reverse transcriptase (RT). It can be used for <i>in vitro</i> reconstitution into heterodimer with p66 RT.
<b>Special Characteristics:</b>	The protein has not been sequenced. It can also be used for antibody production. Production: Produced in <i>E. coli</i> . Derived from HXB2-infected T cells. Non-glycosylated.
<b>Recommended Storage:</b>	Keep at -80°C. Avoid freeze-thaw cycles as reagent degradation may result.
<b>Contributor:</b>	Dr. Stuart Le Grice, Center For AIDS Research at Case Western Reserve University.
<b>References:</b>	<p>Schatz O, Mous J, Le Grice SFJ. HIV-1 RT-associated ribonuclease H displays both endonuclease and 3'----5' exonuclease activity. <i>EMBO J</i> <b>9</b>: 1171-1176, 1990.</p> <p>Le Grice SF, Naas T, Wohlgensinger B, Schatz O. Subunit-selective mutagenesis indicates minimal polymerase activity in heterodimer-associated p51 HIV-1 reverse transcriptase. <i>EMBO J</i> <b>10</b>: 905-911, 1991.</p> <p>Howard KJ, Frank KB, Sim IS, Le Grice SF. Reconstitution and properties of homologous and chimeric HIV-1.HIV-2 p66.p51 reverse transcriptase. <i>J Biol Chem</i> <b>266</b>: 23003-23009, 1991.</p> <p>Lederer H, Schatz O, May R, Crespi H, Darlix JL, Le Grice, SF, Heumann H. Domain structure of the human immunodeficiency virus reverse transcriptase. <i>EMBO J</i></p>

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ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

structure of the human immunodeficiency virus reverse transcriptase. *EMBO J* **11**:1131-1139, 1992.

Jacques PS, Wöhrl BM, Howard KJ, Le Grice SF. Modulation of HIV-1 reverse transcriptase function in "selectively deleted" p66/p51 heterodimers. *J Biol Chem* **269**:1388-1393, 1994.

Le Grice SFJ, Cameron CE, Benkovic SJ. Purification and characterization of human immunodeficiency virus type 1 reverse transcriptase. *Methods Enzymology* **262**: 130-144, 1995.

**NOTE:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, NIAID, NIH: HIV-1 p51 Reverse Transcriptase Recombinant Protein from Dr. Stuart Le Grice." Also include the references cited above in any publications.

**Limited to two aliquots per lab. Larger amounts can be obtained upon request from the contributor.**

**Last Updated:**

April 12, 2017

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