

NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 p51 Reverse Transcriptase Recombinant Protein

Catalog Number: 2896

Lot Number: 95067

Provided: 20 μl (1 mg/ml) in 50 mM Tris-HCl (pH 7.0), 25 mM NaCl, 1 mM EDTA, 1 mM DTT,

50% (v/v) glycerol.

Molecular Weight: 51 kDa.

95%+ by Coomassie Blue and silver staining. Integrity determined immunologically **Purity:**

with anti-RT antibodies. Protein is weakly active as a DNA polymerase if salt is

reduced from standard RT assay buffer.

Special

The protein has not been sequenced. Can be used for in vitro reconstitution into Characteristics: heterodimer with p66 RT. Can be used for antibody production. Production: Produced

in E. coli. Derived from HXB2-infected T cells. Non-glycosylated.

Recommended

Storage:

Keep at -80°C. Avoid freeze-thaw cycles as reagent degradation may result.

Contributor: Dr. Stuart Le Grice, Center For AIDS Research at Case Western Reserve University.

References: Schatz O, Mous J, Le Grice SFJ. HIV-1 RT-associated ribonuclease H displays both endonuclease and 3'----5' exonuclease activity. EMBO J 9: 1171-1176, 1990.

Le Grice SF, Naas T, Wohlgensinger B, Schatz O. Subunit-selective mutagenesis indicates minimal polymerase activity in heterodimer-associated p51 HIV-1 reverse

transcriptase. EMBO J 10: 905-911, 1991.

Howard KJ, Frank KB, Sim IS, Le Grice SF. Reconstitution and properties of

homologous and chimeric HIV-1.HIV-2 p66.p51 reverse transcriptase. J Biol Chem

266: 23003-23009, 1991.

Lederer H, Schatz O, May R, Crespi H, Darlix JL, Le Grice, SF, Heumann H. Domain

structure of the human immunodeficiency virus reverse transcriptase. EMBO J

11:1131-1139, 1992.

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.

REV: 02/02/2016 Page 1 of 2 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: February 02, 2016

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