

NIH AIDS Reagent Program 20301 Century Boulevard

Building 6, Suite 200 Germantown, MD 20874 USA Phone: 240 686 4740 Fax: 301 515 4015 aidsreagent.org

DATA SHEET

Reagent: HIV-2 ROD GST-Tat Expression Vector (GST-Tat 2 99R D8/33 TK)

Catalog Number: 2348

Lot Number: 95125

Release Category: B

Provided: 1 vial of ampicillin-resistant, transformed BL21 cells

Cloning Site: The size of the insert is approximately 219 bp.

Cloning Vector: pGEX2TK

Ampicillin resistant

Description: An expression vector which produces GST fused with the first exon of HIV-2 ROD Tat

protein that has had aa 8-33 deleted and displays reduced transactivation.

Special

Characteristics:

This construct is approximately 5188 bp including the insert.

This plasmid contains a thrombin proteolytic site between the Schistosoma japonicum glutathione S-transferase (GST) sequence and the Tat sequence. Tat is expressed as a GST fusion protein and can be cleaved and purified by thrombin proteolytic digestion.

This construct contains the phosphorylation site for the catalytic subunit of camp-dependent heart muscle kinase. GST-Tat fusions in this vector can thus be labeled directly in vitro to high specific activities with (g32P)ATP and commercially available kinase.

Contributor provided sequence file

Additional HIV-1 and HIV-2 GST-Tat expression vectors are also available. GST-Tat

Expression Vectors

Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C. This construct may also be grown in other competent cells.

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: 07/10/2018 Page 1 of 2

Recommended Storage:

Keep the reagent at -80°C or lower. Avoid freeze-thaw cycles as reagent degradation

may result.

Contributor:

Dr. Andrew Rice

References:

Herrmann, C. H. and Rice, A. P. (1993). Specific interaction of the human

immunodeficiency virus Tat proteins with a cellular protein kinase. Virology, 197(2),

601-8. doi:10.1006/viro.1993.1634 PUBMED

Herrmann, C. H. and Rice, A. P. (1995). Lentivirus Tat proteins specifically associate with a cellular protein kinase, TAK, that hyperphosphorylates the carboxyl-terminal domain of the large subunit of RNA polymerase II: candidate for a Tat cofactor. J Virol,

69(3), 1612-20. <u>PUBMED</u>

Rhim, H., Echetebu, C. O., Herrmann, C. H. and Rice, A. P. (1994). Wild-type and mutant HIV-1 and HIV-2 Tat proteins expressed in Escherichia coli as fusions with glutathione S-transferase. J Acquir Immune Defic Syndr, 7(11), 1116-21. <u>PUBMED</u>

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-2 ROD GST-Tat Expression Vector (GST-Tat 2 99R D8/33 TK) from Dr. Andrew Rice (cat#

2348)." Also include the references cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact the Baylor College of Medicine at the following email addresses: mta@bcm.edu and blg@bcm.edu, before the reagent can be

released.

Last Updated:

July 10, 2018

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: 07/10/2018 Page 2 of 2