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DATA SHEET

Reagent:	HIV-1 HXB2 GST-Tat Expression Vector (GST-Tat 1 86R D2/36 TK)
Catalog Number:	2345
Lot Number:	032601
Release Category:	B
Provided:	1 vial of ampicillin-resistant, transformed BL21 cells
Cloning Site:	The size of the insert is approximately 186 bp.
Cloning Vector:	pGEX2TK Ampicillin resistant
Description:	An expression vector which produces GST fused with transactivation-negative HIV-1 HXB2 Tat protein that has had aa 2-26 deleted.
Special Characteristics:	This construct is approximately 5155 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.

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. PUBMED 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. PUBMED
NOTE:	Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: GST-Tat 1 86R D2/36 TK from Dr. Andrew Rice (cat# 2345)." 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:	November 14, 2018