Protein Tat (TAT) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Protein Tat, Polyclonal Antibody
Full Product Name	Protein Tat Antibody
Product Gene Name	anti-Tat antibody
Product Synonym Names	Protein Tat; Protein Tat (Transactivating regulatory protein)(Fragment)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human immunodeficiency virus type 1 group M subtype B (isolate BRVA)(HIV-1)
Form/Format	Liquid Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH7.4
Purity/Purification	Antigen-affinity
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.
Molecular Weight	~79kD
3D Structure	ModBase 3D Structure for P12507
Immunogen	Recombinant Human immunodeficiency virus type 1 group M subtype B (isolate BRVA)(HIV-1) Protein Tat protein
Conjugation	Non-conjugate
Modification	Unmodified
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-Tat antibody	ELISA (EIA), Western Blot (WB)(ensure identification of antigen)
Related Product Information for anti-Tat antibody	MBS7151881 is an antibody targeting Tat. Also known as Protein Tat Antibody. Reactive in Human immunodeficiency virus type 1 group M subtype B (isolate BRVA)(HIV-1). Host: Rabbit.
Other Notes	Small volumes of anti-Tat antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Tat. It may not necessarily be applicable to this product.

NCBI GI #	135343
NCBI GeneID	0
NCBI Accession #	P12507.1
UniProt Primary Accession #	P12507
NCBI Official Full Name	Protein Tat

UniProt Protein Name	Protein Tat
UniProt Synonym Protein Names	Transactivating regulatory protein
Protein Family	Protein
UniProt Comments for Tat	Nuclear transcriptional activator of viral gene expression, that is essential for viral transcription from the LTR promoter and replication. Acts as a sequence-specific molecular adapter, directing components of the cellular transcription machinery to the viral RNA to promote processive transcription elongation by the RNA polymerase II (RNA pol II) complex, thereby increasing the level of full-length transcripts. In the absence of Tat, the RNA Pol II generates short or non-processive transcripts that terminate at approximately 60 bp from the initiation site. Tat associates with the CCNT1/cyclin-T1 component of the P-TEFb complex (CDK9 and CCNT1), which promotes RNA chain elongation. This binding increases Tat's affinity for a hairpin structure at the 5'-end of all nascent viral mRNAs referred to as the transactivation responsive RNA element (TAR RNA) and allows Tat/P-TEFb complex to bind cooperatively to TAR RNA. The CDK9 component of P-TEFb and other Tat-activated kinases hyperphosphorylate the C-terminus of RNA Pol II that becomes stabilized and much more processive. Other factors such as HTATSF1/Tat-SF1, SUPT5H/SPT5, and HTATIP2 are also important for Tat's function. Besides its effect on RNA Pol II processivity, Tat induces chromatin remodeling of proviral genes by recruiting the histone acetyltransferases (HATs) CREBBP, EP300 and PCAF to the chromatin. This also contributes to the increase in proviral transcription rate, especially when the provirus integrates in transcriptionally silent region of the host genome. To ensure maximal activation of the LTR, Tat mediates nuclear translocation of NF-kappa-B. In this purpose, it activates EIF2AK2/PKR which, in turns, may phosphorylate and target to degradation the inhibitor IkappaB-alpha which normally retains NF-kappa-B in the cytoplasm of unstimulated cells. Through its interaction with TBP, Tat may be involved in transcription initiation as well. Interacts with the cellular capping enzyme RNGTT to mediate co-transcriptional capping of viral mRNAs. Tat protein exerts as well a positive feedback on the translation of its cognate mRNA. Tat can reactivate a latently infected cell by penetrating in it and transactivating its LTR promoter. In the cytoplasm, Tat is thought to act as a translational activator of HIV-1 mRNAs ().
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/protein-tat/7151881