Speckle Targeted PIP5K1A-Regulated Poly (A) Polymerase (TUT1) Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	Speckle targeted PIP5K1A-regulated poly (A) polymerase (TUT1), Recombinant Protein
Full Product Name	Recombinant Human Speckle targeted PIP5K1A-regulated poly (A) polymerase (TUT1) , partial
Product Gene Name	TUT1 recombinant protein
Product Synonym Gene Name	TUT1
Sequence	RSVFVSGFPR DVDSAQLSEY FLAFGPVASV VMDKDKGVFA IVEMGDVGAR EAVLSQSQHS LGGHRLRVRP REQ
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.
Molecular Weight	93,847 Da
Sequence Positions	56-128aa, Partial
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
OMIM	610641
3D Structure	ModBase 3D Structure for Q9H6E5
Species	Human
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for TUT1 recombinant protein	MBS1394768 is a recombinant protein targeting TUT1. Also known as Recombinant Human Speckle targeted PIP5K1A-regulated poly (A) polymerase (TUT1) , partial. Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of TUT1 recombinant protein 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 TUT1. It may not necessarily be applicable to this product.

NCBI GI #	226371750
NCBI GeneID	64852
NCBI Accession #	NP_073741.2
UniProt Primary Accession #	Q9H6E5
UniProt Secondary Accession #	Q2NL65; Q7L583; Q9H6H7; A1A527; A8K995

UniProt Related Accession #	Q9H6E5
GenBank Nucleotide #	NM_022830.2
NCBI Official Full Name	speckle targeted PIP5K1A-regulated poly(A) polymerase
NCBI Official Synonym Full Names	terminal uridylyl transferase 1, U6 snRNA-specific
NCBI Official Symbol	TUT1
NCBI Official Synonym Symbols	PAPD2; RBM21; URLC6; TUTase; STARPAP
UniProt Protein Name	Speckle targeted PIP5K1A-regulated poly(A) polymerase
UniProt Synonym Protein Names	RNA-binding motif protein 21; RNA-binding protein 21; U6 snRNA-specific terminal uridylyltransferase 1 (EC:2.7.7.52); U6-TUTase
Protein Family	Speckle targeted PIP5K1A-regulated poly(A) polymerase
UniProt Gene Name	TUT1
UniProt Synonym Gene Names	RBM21; Star-PAP; RNA-binding protein 21; U6-TUTase
NCBI Protein Information	speckle targeted PIP5K1A-regulated poly(A) polymerase
NCBI Summary for TUT1	This gene encodes a nucleotidyl transferase that functions as both a terminal uridylyltransferase and a nuclear poly(A) polymerase. The encoded enzyme specifically adds and removes nucleotides from the 3' end of small nuclear RNAs and select mRNAs and may function in controlling gene expression and cell proliferation.[provided by RefSeq, Apr 2009]
UniProt Comments for TUT1	Poly(A) polymerase that creates the 3'-poly(A) tail of specific pre-mRNAs. Localizes to nuclear speckles together with PIP5K1A and mediates polyadenylation of a select set of mRNAs, such as HMOX1. In addition to polyadenylation, it is also required for the 3'-end cleavage of pre-mRNAs: binds to the 3'UTR of targeted pre-mRNAs and promotes the recruitment and assembly of the CPSF complex on the 3'UTR of pre-mRNAs. In addition to adenylyltransferase activity, also has uridylyltransferase activity. However, the ATP ratio is higher than UTP in cells, suggesting that it functions primarily as a poly(A) polymerase. Acts as a specific terminal uridylyltransferase for U6 snRNA in vitro: responsible for a controlled elongation reaction that results in the restoration of the four 3'-terminal UMP-residues found in newly transcribed U6 snRNA. Not involved in replication-dependent histone mRNA degradation.
Research Articles on TUT1	**1.** KLHL7 is a novel regulator of the nucleolus associated with TUT1 ubiquitination, and pathogenic KLHL7 mutants may provide valuable information to elucidate a mechanism of retinitis pigmentosa etiology.
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.