Datasheet for ABIN7563459

EXOSC10 Protein (AA 1-887) (His tag)

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Overview

Quantity:	1 mg
Target:	EXOSC10
Protein Characteristics:	AA 1-887
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EXOSC10 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Exosc10 Protein expressed in mammalian cells.
Sequence:	MAPPSPREHQ SAPATSATKP DAEMVLPGFP DADSFVKFAL GSVVAVTKAS GGLPQFGDEY DFYRSFPAFQ AFCETQGDRL LQCMSRVMQY HGCRSNIKDR SKVTELEDKF DLLVDTNDVI LERVGMLLDE ASGVNKHQQP VLPAGLQVPK TIVSSWNRKA GEYGKKAKSE TFRLLHAKNI VRPQLRFREK IDNSNTPFLP KIFVKPNARK PLPLALSKER RERPQDRPED LDVPPALADF IHQQRTQQVE QDMFAHPYQY ELDHFTPPQS VLQRPKPQLY RAVGETPCHL VSSLDELVEL NEKLLGCQEF AVDLEHHSYR SFLGLTCLMQ ISTRTEDFIV DTLELRSDMY ILNESLTDPA IVKVFHGADS DIEWLQKDFG LYVVNMFDTH QAARLLNLAR HSLDHLLRLY CGVESNKQYQ LADWRIRPLP EEMLSYARDD THYLLYIYDR MRLELWERGN HQPVQLQVVW QRSRDICLKK FVKPIFTDES YLELYRKQKK HLNSQQLTAF QLLFAWRDKT ARREDESYGY VLPNHMMLKI AEELPKEPQG IIACCNPVPP LVRQQINEMH LLIQQAREMP LLKSENAAGV RKSGPLPSAE RLENDLFGPH DCSHAPPDNY QNTSTDGTLP LQKQPSLFTE GKEETSVDAG CLLATAVITL FSEPNTEEGG KTPLTVAQKK AQNIMQSFEN PFRMFLPSLE HKAHISQAAK FDPSSKIYEI

Product Details

	SNRWKLASQV QVQKEPKEAT KKKVAEQTAA REEAKEEAAA GVLEQAIPVR QQAALENATK KRERATSDLR TIEQKQEKKR LKSSKKAKDP DPPGKDFSPY DYSQSDFRAF AGDSKSKPSS QFDPNKLAPS GKKGVGAKKC KQSVGNKSMS FAVGKSDRGF RHNWPKR **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	EXOSC10
Alternative Name:	Exosc10 (EXOSC10 Products)
Background:	Exosome complex component 10 (EC 3.1.13.-) (Autoantigen PM/Scl 2 homolog) (Polymyositis/scleroderma autoantigen 2 homolog),FUNCTION: Catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in

Target Details

	the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as antisense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. EXOSC10 is required for nucleolar localization of C1D and probably mediates the association of MTREX, C1D and MPHOSPH6 with the RNA exosome involved in the maturation of 5.8S rRNA (By similarity). Plays a role in the recruitment of replication protein A complex (RPA) and RAD51 to DNA double-strand breaks caused by irradiation, contributing to DNA repair by homologous recombination (By similarity). Regulates levels of damage-induced RNAs in order to prevent DNA-RNA hybrid formation at DNA double-strand breaks and limit DNA end resection after damage (By similarity). Plays a role in oocyte development, maturation and survival (PubMed:36923944, PubMed:32313933). Required for normal testis development and mitotic division of spermatogonia (PubMed:29118343). Plays a role in proper embryo development (PubMed:36923944, PubMed:34965385, PubMed:32313933). Required for global protein translation (By similarity). Required for cell proliferation (By similarity). {ECO:0000250|UniProtKB:Q01780, ECO:0000269|PubMed:29118343, ECO:0000269|PubMed:32313933, ECO:0000269|PubMed:34965385, ECO:0000269|PubMed:36923944}.
Molecular Weight:	100.9 kDa
UniProt:	P56960

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months