Datasheet for ABIN7563424

TIA1 Protein (AA 1-386) (His tag)

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Overview

Quantity:	1 mg
Target:	TIA1
Protein Characteristics:	AA 1-386
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TIA1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Tia1 Protein expressed in mammalian cells.
Sequence:	MEDEMPKTLY VGNLSRDVTE ALILQLFSQI GPCKNCKMIM DTAGNDPYCF VEFHEHRHAA AALAAMNGRK IMGKEVKVNW ATTPSSQKKD TSSSTVVSTQ RSQDHFHVFV GDLSPEITTE DIKAAFAPFG RISDARVVKD MATGKSKGYG FVSFFNKWDA ENAIQQMGGQ WLGGRQIRTN WATRKPPAPK STYESNTKQL SYDEVVSQSS PNNCTVYCGG VTSGLTEQLM RQTFSPFGQI MEIRVFPDKG YSFVRFSSHE SAAHAIVSVN GTTIEGHVVK CYWGKETLDM INPVQQQNQI GYPPTYGQWG QWYGNAQQIG QYVPNGWQVP AYGVYGQPWS QQGFNQTQSS APWMGPNYSV PPPQGQNGSM LPSQPAGYRV AGYETQ **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:

Product Details

- 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:	TIA1
Alternative Name:	Tia1 (TIA1 Products)
Background:	Cytotoxic granule associated RNA binding protein TIA1 (Nucleolysin TIA-1) (RNA-binding protein TIA-1) (T-cell-restricted intracellular antigen-1) (TIA-1),FUNCTION: RNA-binding protein involved in the regulation of alternative pre-RNA splicing and mRNA translation by binding to uridine-rich (U-rich) RNA sequences (PubMed:10938105, PubMed:16227602). Binds to U-rich sequences immediately downstream from a 5' splice sites in a uridine-rich small nuclear ribonucleoprotein (U snRNP)-dependent fashion, thereby modulating alternative pre-RNA splicing (PubMed:10938105). Preferably binds to the U-rich IAS1 sequence in a U1 snRNP-dependent manner, this binding is optimal if a 5' splice site is adjacent to IAS1 (PubMed:10938105). Activates the use of heterologous 5' splice sites, the activation depends on the intron sequence downstream from the 5' splice site, with a preference for a downstream U-rich sequence (PubMed:10938105). By interacting with SNRPC/U1-C, promotes recruitment and binding of spliceosomal U1 snRNP to 5' splice sites followed by U-rich sequences, thereby facilitating atypical 5' splice site recognition by U1 snRNP (By similarity). Activates splicing of alternative exons with weak 5' splice sites followed by a U-rich stretch on its own pre-mRNA

Target Details

	and on TIAR mRNA (PubMed:11514562). Acts as a modulator of alternative splicing for the apoptotic FAS receptor, thereby promoting apoptosis (By similarity). Binds to the 5' splice site region of FAS intron 5 to promote accumulation of transcripts that include exon 6 at the expense of transcripts in which exon 6 is skipped, thereby leading to the transcription of a membrane-bound apoptotic FAS receptor, which promotes apoptosis (By similarity). Binds to a conserved AU-rich cis element in COL2A1 intron 2 and modulates alternative splicing of COL2A1 exon 2 (By similarity). Also binds to the equivalent AT-rich element in COL2A1 genomic DNA, and may thereby be involved in the regulation of transcription (By similarity). Involved in the repression of mRNA translation by binding to AU-rich elements (AREs) located in mRNA 3' untranslated regions (3' UTRs), including target ARE-bearing mRNAs encoding TNF and PTGS2 (PubMed:16227602, PubMed:10921895). Also participates in the cellular response to environmental stress, by acting downstream of the stress-induced phosphorylation of EIF2S1/EIF2A to promote the recruitment of untranslated mRNAs to cytoplasmic stress granules (SGs), leading to stress-induced translational arrest (By similarity). Formation and recruitment to SGs is regulated by Zn(2+) (PubMed:29298433). Possesses nucleolytic activity against cytotoxic lymphocyte target cells (By similarity). {ECO:0000250|UniProtKB:P31483, ECO:0000269|PubMed:10921895, ECO:0000269|PubMed:10938105, ECO:0000269|PubMed:11514562, ECO:0000269|PubMed:16227602, ECO:0000269|PubMed:29298433}.
Molecular Weight:	42.8 kDa
UniProt:	P52912

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

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months