

Datasheet for ABIN7564895

CLP1 Protein (AA 1-425) (His tag)



Overview

Quantity:	1 mg
Target:	CLP1
Protein Characteristics:	AA 1-425
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CLP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Clp1 Protein expressed in mammalien cells.
Sequence:	MSEESNDDKK PTTKFELERE TELRFEVEAS QSVQLELLAG MAEIFGTELT RNKKFTFDAG
	AKVAVFTWHG CSLQLSGRTE VAYVSKDTPM LLYLNTHTAL EQMRRQAEKE EERGPRVMVV
	GPTDVGKSTV CRLLLNYAVR LGRRPTYVEL DVGQGSVSIP GTMGALYIER PADVEEGFSI
	QAPLVYHFGS TTPGTNIKLY NKITSRLADV FNQRCEVNRR ASVSGCVINT CGWVKGYGYQ
	ALVHAASAFE VDVVVVLDQE RLYNELKRDL PHFVRTVLLP KSGGVVERSK DFRRECRDER
	IREYFYGFRG CFYPHAFNVK FSDVKIYKVG APTIPDSCLP LGMSQEDNQL KLVPVTPGRD
	MVHHLLSVST AEGTEENLSE TSVAGFIVVT SVDVEHQVFT VLSPAPRPLP KNFLLIMDIR FMDLK
	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.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien 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, Western Blot

Grade:

custom-made

Target Details

Target: CLP1

Alternative Name: Clp1 (CLP1 Products)

Background:

Polyribonucleotide 5'-hydroxyl-kinase Clp1 (EC 2.7.1.78) (Polyadenylation factor Clp1) (Polynucleotide kinase Clp1) (Pre-mRNA cleavage complex II protein Clp1),FUNCTION:

Polynucleotide kinase that can phosphorylate the 5'-hydroxyl groups of double-stranded RNA (dsRNA), single-stranded RNA (ssRNA), double-stranded DNA (dsDNA) and double-stranded DNA:RNA hybrids. dsRNA is phosphorylated more efficiently than dsDNA, and the RNA component of a DNA:RNA hybrid is phosphorylated more efficiently than the DNA component.

Plays a key role in both tRNA splicing and mRNA 3'-end formation. Component of the tRNA splicing endonuclease complex: phosphorylates the 5'-terminus of the tRNA 3'-exon during tRNA splicing, this phosphorylation event is a prerequisite for the subsequent ligation of the two exon halves and the production of a mature tRNA (PubMed:23474986, PubMed:24766809). Its role in tRNA splicing and maturation is required for cerebellar development (PubMed:24766809). Component of the pre-mRNA cleavage complex II (CF-II), which seems to be required for mRNA 3'-end formation. Also phosphorylates the 5'-terminus of exogenously introduced short interfering RNAs (siRNAs), which is a necessary prerequisite for their

Target Details

	incorporation into the RNA-induced silencing complex (RISC). However, endogenous siRNAs and microRNAs (miRNAs) that are produced by the cleavage of dsRNA precursors by DICER1 already contain a 5'-phosphate group, so this protein may be dispensible for normal RNA-mediated gene silencing. {ECO:0000269 PubMed:23474986, ECO:0000269 PubMed:24766809}
Molecular Weight:	47.7 kDa
UniProt:	Q99LI9
Pathways:	Ribonucleoprotein Complex Subunit Organization
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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