Datasheet for ABIN3089023

ANKZF1 Protein (AA 1-726) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ANKZF1
Protein Characteristics:	AA 1-726
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ANKZF1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSPAPDAAPA PASISLFDLS ADAPVFQGLS LVSHAPGEAL ARAPRTSCSG SGERESPERK LLQGPMDISE KLFCSTCDQT FQNHQEQREH YKLDWHRFNL KQRLKDKPLL SALDFEKQSS TGDLSSISGS EDSDSASEED LQTLDRERAT FEKLSRPPGF YPHRVLFQNA QGQFLYAYRC VLGPHQDPPE EAELLLQNLQ SRGPRDCVVL MAAAGHFAGA IFQGREVVTH KTFHRYTVRA KRGTAQGLRD ARGGPSHSAG ANLRRYNEAT LYKDVRDLLA GPSWAKALEE AGTILLRAPR SGRSLFFGGK GAPLQRGDPR LWDIPLATRR PTFQELQRVL HKLTTLHVYE EDPREAVRLH SPQTHWKTVR EERKKPTEEE IRKICRDEKE ALGQNEESPK QGSGSEGEDG FQVELELVEL TVGTLDLCES EVLPKRRRRK RNKKEKSRDQ EAGAHRTLLQ QTQEEEPSTQ SSQAVAAPLG PLLDEAKAPG QPELWNALLA ACRAGDVGVL KLQLAPSPAD PRVLSLLSAP LGSGGFTLLH AAAAAGRGSV VRLLLEAGAD PTVQDSRARP PYTVAADKST RNEFRRFMEK NPDAYDYNKA QVPGPLTPEM EARQATRKRE QKAARRQREE QQQRQQEQEE REREEQRRFA ALSDREKRAL

	AAERRLAAQL GAPTSPIPDS AIVNTRRCWS CGASLQGLTP FHYLDFSFCS TRCLQDHRRQ AGRPSS **Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • 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. 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. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	ANKZF1
Alternative Name:	ANKZF1 (ANKZF1 Products)
Background:	TRNA endonuclease ANKZF1 (EC 3.1.-.-) (Ankyrin repeat and zinc finger domain-containing protein 1) (Zinc finger protein 744),FUNCTION: Endonuclease that cleaves polypeptidyl-tRNAs downstream of the ribosome-associated quality control (RQC) pathway to release incompletely synthesized polypeptides for degradation (PubMed:30244831, PubMed:29632312, PubMed:31011209). The RQC pathway disassembles aberrantly stalled translation complexes to recycle or degrade the constituent parts (PubMed:30244831, PubMed:29632312, PubMed:31011209). ANKZF1 acts downstream disassembly of stalled ribosomes and specifically cleaves off the terminal 3'-CCA nucleotides universal to all tRNAs from polypeptidyl-tRNAs, releasing (1) ubiquitinated polypeptides from 60S ribosomal subunit for degradation and (2) cleaved tRNAs (PubMed:31011209). ANKZF1-cleaved tRNAs are then repaired and recycled by ELAC1 and TRNT1 (PubMed:31011209, PubMed:32075755). Also plays a role in the cellular response to hydrogen peroxide and in the maintenance of mitochondrial integrity under conditions of cellular stress (PubMed:28302725). {ECO:0000269|PubMed:28302725, ECO:0000269|PubMed:29632312, ECO:0000269|PubMed:30244831, ECO:0000269|PubMed:31011209, ECO:0000269|PubMed:32075755}.
Molecular Weight:	80.9 kDa
UniProt:	Q9H8Y5

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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for

Application Details

	protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months