Datasheet for ABIN3093096

Interleukin enhancer-binding factor 3 (ILF3) (AA 1-894) protein (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	Interleukin enhancer-binding factor 3 (ILF3)
Protein Characteristics:	AA 1-894
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MRPMRIFVND DRHVMAKHSS VYPTQEELEA VQNMVSHTER ALKAVSDWID EQEKGSSEQA ESDNMDVPPE DDSKEGAGEQ KTEHMTRTLR GVMRVGLVAK GLLLKGDLDL ELVLLCKEKP TTALLDKVAD NLAIQLAAVT EDKYEILQSV DDAAIVIKNT KEPPLSLTIH LTSPVVREEM EKVLAGETLS VNDPPDVLDR QKCLAALASL RHAKWFQARA NGLKSCVIVI RVLRDLCTRV PTWGPLRGWP LELLCEKSIG TANRPMGAGE ALRRVLECLA SGIVMPDGSG IYDPCEKEAT DAIGHLDRQQ REDITQSAQH ALRLAAFGQL HKVLGMDPLP SKMPKKPKNE NPVDYTVQIP PSTTYAITPM KRPMEEDGEE KSPSKKKKKI QKKEEKAEPP QAMNALMRLN QLKPGLQYKL VSQTGPVHAP IFTMSVEVDG NSFEASGPSK KTAKLHVAVK VLQDMGLPTG AEGRDSSKGE DSAEETEAKP AVVAPAPVVE AVSTPSAAFP SDATAEQGPI LTKHGKNPVM ELNEKRRGLK YELISETGGS HDKRFVMEVE VDGQKFQGAG SNKKVAKAYA ALAALEKLFP DTPLALDANK KKRAPVPVRG GPKFAAKPHN PGFGMGGPMH NEVPPPPNLR GRGRGGSIRG RGRGRGFGGA NHGGYMNAGA GYGSYGYGGN SATAGYSQFY SNGGHSGNAS GGGGGGGGGS SGYGSYYQGD

NYNSPVPPKH AGKKQPHGGQ QKPSYGSGYQ SHQGQQQSYN QSPYSNYGPP QGKQKGYNHG QGSYSYSNSY NSPGGGGGSD YNYESKFNYS GSGGRSGGNS YGSGGASYNP GSHGGYGGGS GGGSSYQGKQ GGYSQSNYNS PGSGQNYSGP PSSYQSSQGG YGRNADHSMN YQYR

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	Interleukin enhancer-binding factor 3 (ILF3)
Alternative Name:	ILF3 (ILF3 Products)
Background:	Interleukin enhancer-binding factor 3 (Double-stranded RNA-binding protein 76) (DRBP76) (M-phase phosphoprotein 4) (MPP4) (Nuclear factor associated with dsRNA) (NFAR) (Nuclear factor of activated T-cells 90 kDa) (NF-AT-90) (Translational control protein 80) (TCP80),FUNCTION: RNA-binding protein that plays an essential role in the biogenesis of circular RNAs (circRNAs) which are produced by back-splicing circularization of pre-mRNAs. Within the nucleus, promotes circRNAs processing by stabilizing the regulatory elements residing in the flanking introns of the circularized exons. Plays thereby a role in the back-splicing of a subset of circRNAs (PubMed:28625552). As a consequence, participates in a wide range of transcriptional and post-transcriptional processes. Binds to poly-U elements and AU-rich elements (AREs) in the 3'-UTR of target mRNAs (PubMed:14731398). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response (PubMed:21123651, PubMed:34110282). Mechanistically, ILF3 becomes phosphorylated and activated by the double-stranded RNA-activated protein kinase/PKR which releases ILF3 from cellular mature circRNAs. In turn, unbound ILF3 Molecules are able to interact with and thus inhibit viral mRNAs (PubMed:21123651, PubMed:28625552). {ECO:0000269|PubMed:14731398, ECO:0000269|PubMed:21123651, ECO:0000269|PubMed:28625552, ECO:0000269|PubMed:9442054}., FUNCTION: (Microbial infection) Plays a positive role in HIV-1 virus production by binding to and thereby stabilizing HIV-1 RNA, together with ILF3. {ECO:0000269|PubMed:26891316}.
Molecular Weight:	95.3 kDa
UniProt:	Q12906

Target Details

Pathways:	M Phase

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 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)