

Datasheet for ABIN3082900

LARP7 Protein (AA 1-582) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	LARP7
Protein Characteristics:	AA 1-582
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This LARP7 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>METESGNQEK VMEEESTEKK KEVEKKKRSR VKQVLADIAK QVDFWFGDAN LHKDRFLREQ IEKSRDGYVD ISLLVSFNKM KKLTTDGKLI ARALRSSAVV ELDLEGTRIR RKKPLGERPK DEDERTVYVE LLPKNVNSHW IERVFGKCGN VVYISIPHYK STGDPKGFAF VEFETKEQAA KAIEFLNNPP EEAPRKP GIP PKTVKNKPIP ALRVVEEKKK KKKKKGRMKK EDNIQAKEEN MDTSNSTISK MKRSRPTSEG SDIESTEPQK QCSKKKKKRD RVEASSLPEV RTGKRKRSSS EDAESLAPRS KVKKIIQKDI IKEASEASKE NRDIEISTEE EKDTGDLKDS SLLKTKRKHK KKHKERHKMG EEVIPLRVLS KSEWMDLKKE YLALQKASMA SLKKTISQIK SESEMETDSG VPQNTGMKNE KTANREECRT QEKVNATGPQ FVSGVIVKII STEPLPGRKQ VRDTLAAISE VLYVDLLEGD TECHARFKTP EDAQVINAY TEINKKHCWK LEILSGDHEQ RYWQKILVDR QAKLNQPREK KRGTEKLITK AEKIRLAKTQ QASKHIRFSE YD</p>

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®).

Purity:

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

Grade:

custom-made

Target Details

Target:	LARP7
Alternative Name:	LARP7 (LARP7 Products)
Background:	<p>La-related protein 7 (La ribonucleoprotein domain family member 7) (hLARP7) (P-TEFb-interaction protein for 7SK stability) (PIP7S),FUNCTION: RNA-binding protein that specifically binds distinct small nuclear RNA (snRNAs) and regulates their processing and function (PubMed:18249148, PubMed:32017898). Specifically binds the 7SK snRNA (7SK RNA) and acts as a core component of the 7SK ribonucleoprotein (RNP) complex, thereby acting as a negative regulator of transcription elongation by RNA polymerase II (PubMed:18249148, PubMed:18483487). The 7SK RNP complex sequesters the positive transcription elongation factor b (P-TEFb) in a large inactive 7SK RNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation (PubMed:18249148, PubMed:18483487). The 7SK RNP complex also promotes snRNA gene transcription by RNA polymerase II via interaction with the little elongation complex (LEC) (PubMed:28254838). LARP7 specifically binds to the highly conserved 3'-terminal U-rich stretch of 7SK RNA, on stimulation, remains associated with 7SK RNA, whereas P-TEFb is released from the complex (PubMed:18483487, PubMed:18281698). LARP7 also acts as a regulator of mRNA splicing fidelity by promoting U6 snRNA processing (PubMed:32017898). Specifically binds U6 snRNAs and associates with a subset of box C/D RNP complexes: promotes U6 snRNA 2'-O-methylation by facilitating U6 snRNA loading into box C/D RNP complexes (PubMed:32017898). U6 snRNA 2'-O-methylation is required for mRNA splicing fidelity (PubMed:32017898). Binds U6 snRNAs with a 5'-CAGGG-3' sequence motif (PubMed:32017898). U6 snRNA processing is required for spermatogenesis (By similarity). {ECO:0000250 UniProtKB:Q05CL8, ECO:0000269 PubMed:18249148, ECO:0000269 PubMed:18281698, ECO:0000269 PubMed:18483487, ECO:0000269 PubMed:28254838, ECO:0000269 PubMed:32017898}.</p>
Molecular Weight:	66.9 kDa
UniProt:	Q4G0J3
Pathways:	Chromatin Binding , SARS-CoV-2 Protein Interactome , The Global Phosphorylation Landscape of SARS-CoV-2 Infection

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
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Application Details

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.

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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