

Datasheet for ABIN3136235

## LARS Protein (AA 1-1178) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	LARS
Protein Characteristics:	AA 1-1178
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This LARS protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MAGRKGTA KV DFLKEIEKEA QQKWAEKVF EVSASRLEKQ KQSSKGKYFV TFPYPYMNGR</p> <p>LHLGHTFSLS KCEFAVG YQR LKGKSC LFPF GLHCTGMPIK ACADKLKREI ELYGCPPDFP</p> <p>EEEEEEEESS AKPGDIVVRD KAKGKKS KAA AKAGSSKYQW DIMKSLGLSD DDIVKFSEAE</p> <p>HWLDYFPPLA VQDLKTIGLK VDWRRSFITT DVNPYYDSFV RWQFLTLRER NKIKFGKRYT</p> <p>IYSPKDGQPC MDHDRQTGEG VGPQEYTLVK LKVLEPYPSK LSGLKGNIF LVAATLRPET</p> <p>MFGQTNCWVR PDMKYIGFET ANGDI FICTQ RAARNMSYQG FTKHNGVVPV VKELMGEEIL</p> <p>GASLSAPLTC YKV VYVLPML TIKEDKGTGV VTSVPSDSPD DLAALRDLKK KQALRTKFGI</p> <p>RDDMVLPFEP VPVLEIPGIG NLP AVTV CDE LKIQSQNDRE KLAEAKEKLY LRGFYDGVML</p> <p>VDGFKGQKI Q HVKKT IQNM IDAGDALIYM EPEKQVMSRS ADECVVALCD QWYLDYGDEN</p> <p>WKKQTFQCLK NMETFCEESR KNFEASLDWL QEHA CSRTYG LGTRL PWDEQ WLIESLSDST</p> <p>IYMAFYTVAH LLQG GDLNGQ AESPLGIRPQ QMTKDVWDYV FFKDAPFPKT QIPKEKLDQL</p>

KQEFWFYYPV DLRASGKDLI PNHLSYYIYN HVAMWPEQSD KWPVSVRANG HLLLNSEKMS  
KSTGNFLTLS QAVDKFSADG MRLALADAGD TVEDANFVEA MADAGILRLY TWVEWVKEML  
ASCSSLRSGP ADSFNDRVFA SEMNAGIIKT DQNYEKMMFK EALKTGFFEF QAAKDKYREL  
ATEGMHRELV FRFIEVQIL LTPFCPLCE HIWTLLGKPD SIMHASWPVA GPVDESLIRS  
SQYLMEVAHD LRLRLKNYMM PAKGKKTDKQ PAQRPSHCTI YVAKNYPVWQ HITLTTLRSH  
FEANNGKLPD NKVIASELGS LPELKKYMKK VMPFVAMIKE NMEKKGPRVL DLELEFDEQA  
VLMENIVYLT NSLELEHIEV KFASEAEDKV REECCPGKPL NVFRTEPGVP VSLVNPQPSS  
GHFSTKIDIR QGDSCESIIR RLMKTDGRIK DLSKVKLMRF DDPLLGPRRV PVLGREHSEK  
TLISENAVFH VDLVSKKVHL TENGLRTDIG DTMVYLVH

**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!

## Product Details

### 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: LARS

Alternative Name: Lars1 ([LARS Products](#))

Background: Leucine--tRNA ligase, cytoplasmic (EC 6.1.1.4) (Leucyl-tRNA synthetase) (LeuRS),FUNCTION: Aminoacyl-tRNA synthetase that catalyzes the specific attachment of leucine to its cognate tRNA (tRNA(Leu)). It performs tRNA aminoacylation in a two-step reaction: Leu is initially activated by ATP to form a leucyl-adenylate (Leu-AMP) intermediate, then the leucyl moiety is transferred to the acceptor 3' end of the tRNA to yield leucyl-tRNA. To improve the fidelity of catalytic reactions, it is also able to hydrolyze misactivated aminoacyl-adenylate intermediates (pre-transfer editing) and mischarged aminoacyl-tRNAs (post-transfer editing). {ECO:0000250|UniProtKB:Q9P2J5}.

Molecular Weight: 134.2 kDa

UniProt: [Q8BMJ2](#)

Pathways: [EGFR Signaling Pathway](#)

## 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

Application Details

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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months