Datasheet for ABIN3131713

ELOVL3 Protein (AA 1-271) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ELOVL3
Protein Characteristics:	AA 1-271
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ELOVL3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MDTSMNFSRG LKMDLMQPYD FETFQDLRPF LEEYWVSSFL IVVVYLLLIV VGQTYMRTRK SFSLQRPLIL WSFFLAIFSI LGTLRMWKFM ATVMFTVGLK QTVCFAIYTD DAVVRFWSFL FLLSKVVELG DTAFIILRKR PLIFVHWYHH STVLLFTSFG YKNKVPSGGW FMTMNFGVHS VMYTYYTMKA AKLKHPNLLP MVITSLQILQ MVLGTIFGIL NYIWRQEKGC HTTTEHFFWS FMLYGTYFIL FAHFFHRAYL RPKGKVASKS Q **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.

Product Details

- 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:	ELOVL3
Alternative Name:	Elovl3 (ELOVL3 Products)

Target Details

Background:	Very long chain fatty acid elongase 3 (EC 2.3.1.199) (3-keto acyl-CoA synthase Elovl3) (CIN-2) (Cold-inducible glycoprotein of 30 kDa) (ELOVL fatty acid elongase 3) (ELOVL FA elongase 3) (Elongation of very long chain fatty acids protein 3) (Very long chain 3-ketoacyl-CoA synthase 3) (Very long chain 3-oxoacyl-CoA synthase 3),FUNCTION: Catalyzes the first and rate-limiting reaction of the four reactions that constitute the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process allows the addition of 2 carbons to the chain of long- and very long-chain fatty acids (VLCFAs) per cycle. Condensing enzyme that exhibits activity toward saturated and unsaturated acyl-CoA substrates with higher activity toward C18 acyl-CoAs, especially C18:0 acyl-CoAs. May participate in the production of saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. Participates in the formation of certain VLCFA and triglycerides in certain cells of the hair follicles and the sebaceous glands, required for skin barrier function. Critical enzyme for lipid accumulation and metabolic activity in brown adipocytes during the early phase of the tissue recruitment. Plays a role in lipid storage and in resistance to diet-induced obesity. {ECO:0000255|HAMAP-Rule:MF_03203, ECO:0000269|PubMed:10791983, ECO:0000269|PubMed:14581464, ECO:0000269|PubMed:16326704, ECO:0000269|PubMed:20605947}.
Molecular Weight:	32.1 kDa
UniProt:	O35949

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!

Application Details

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