Datasheet for ABIN3088531

ALDH1L1 Protein (AA 1-902) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	ALDH1L1
Protein Characteristics:	AA 1-902
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALDH1L1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MKIAVIGQSL FGQEVYCHLR KEGHEVVGVF TVPDKDGKAD PLGLEAEKDG VPVFKYSRWR AKGQALPDVV AKYQALGAEL NVLPFCSQFI PMEIISAPRH GSIIYHPSLL PRHRGASAIN WTLIHGDKKG GFSIFWADDG LDTGDLLLQK ECEVLPDDTV STLYNRFLFP EGIKGMVQAV RLIAEGKAPR LPQPEEGATY EGIQKKETAK INWDQPAEAI HNWIRGNDKV PGAWTEACEQ KLTFFNSTLN TSGLVPEGDA LPIPGAHRPG VVTKAGLILF GNDDKMLLVK NIQLEDGKMI LASNFFKGAA SSVLELTEAE LVTAEAVRSV WQRILPKVLE VEDSTDFFKS GAASVDVVRL VEEVKELCDG LELENEDVYM ASTFGDFIQL LVRKLRGDDE EGECSIDYVE MAVNKRTVRM PHQLFIGGEF VDAEGAKTSE TINPTDGSVI CQVSLAQVTD VDKAVAAAKD AFENGRWGKI SARDRGRLMY RLADLMEQHQ EELATIEALD AGAVYTLALK THVGMSIQTF RYFAGWCDKI QGSTIPINQA RPNRNLTLTR KEPVGVCGII IPWNYPLMML SWKTAACLAA GNTVVIKPAQ VTPLTALKFA ELTLKAGIPK GVVNVLPGSG SLVGQRLSDH PDVRKIGFTG STEVGKHIMK

SCAISNVKKV SLELGGKSPL IIFADCDLNK AVQMGMSSVF FNKGENCIAA GRLFVEDSIH DEFVRRVVEE VRKMKVGNPL DRDTDHGPQN HHAHLVKLME YCQHGVKEGA TLVCGGNQVP RPGFFFEPTV FTDVEDHMFI AKEESFGPVM IISRFADGDL DAVLSRANAT EFGLASGVFT RDINKALYVS DKLQAGTVFV NTYNKTDVAA PFGGFKQSGF GKDLGEAALN EYLRVKTVTF EY

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.

Product Details

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:	ALDH1L1
Alternative Name:	ALDH1L1 (ALDH1L1 Products)
Background:	Cytosolic 10-formyltetrahydrofolate dehydrogenase (10-FTHFDH) (FDH) (EC 1.5.1.6) (Aldehyde dehydrogenase family 1 member L1),FUNCTION: Cytosolic 10-formyltetrahydrofolate dehydrogenase that catalyzes the NADP(+)-dependent conversion of 10-formyltetrahydrofolate to tetrahydrofolate and carbon dioxide (PubMed:19933275, PubMed:21238436). May also have an NADP(+)-dependent aldehyde dehydrogenase activity towards formaldehyde, acetaldehyde, propionaldehyde, and benzaldehyde (By similarity). {ECO:0000250|UniProtKB:P28037, ECO:0000269|PubMed:19933275, ECO:0000269|PubMed:21238436}.
Molecular Weight:	98.8 kDa
UniProt:	O75891

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