

### Datasheet for ABIN3124747

# ALDH8A1 Protein (AA 1-487) (Strep Tag)



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Quantity:	1 mg
Target:	ALDH8A1
Protein Characteristics:	AA 1-487
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALDH8A1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

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Product Details	
Brand:	AliCE®
Sequence:	MAGKRELLML ENFIGGKFLP CNSYIDSYDP STGEVYCKVP NSGKEEIEAA VEAAREAFPA
	WSSRSPQERS LVLNRLADVL EQSLEELAQA ESKDQGKTLT LARTMDIPRS VLNFRFFASS
	NLHHVSECTQ MSHLGCMHYT VRTPVGIAGL ISPWNLPLYL LTWKIAPAIA AGNTVIAKPS
	EMTSVTAWMF CKLLDKAGVP PGVINIVFGT GPRVGEALVS HPEVPLISFT GSQPTAERIT
	QLSAPHCKKL SLELGGKNPA IIFEDANLEE CIPATVRSSF ANQGEICLCT SRIFVQRSIY
	SEFLKRFVEA TRKWKVGVPS DPSANMGALI SKAHLEKVRS YVLKAQTEGA RILCGEGVDQ
	LSLPLRNQAG YFMLPTVITD IKDESRCMTE EIFGPVTCVV PFDSEEEVIT RANSVRYGLA
	ATVWSKDVGR IHRVAKKLQS GLVWTNCWLI RELNLPFGGM KSSGIGREGA KDSYDFFTEI
	KTITIKY
	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 posttranslational 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

rarger Details			
Target:	ALDH8A1		
Alternative Name:	Aldh8a1 (ALDH8A1 Products)		
Background:	2-aminomuconic semialdehyde dehydrogenase (EC 1.2.1.32) (Aldehyde dehydrogenase family 8 member A1) (Retinal dehydrogenase 4),FUNCTION: Catalyzes the NAD-dependent oxidation of 2-aminomuconic semialdehyde of the kynurenine metabolic pathway in L-tryptophan degradation. {ECO:0000250 UniProtKB:Q9H2A2}.		
Molecular Weight:	53.7 kDa		
UniProt:	Q8BH00		
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 product 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		

# Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months