

# Datasheet for ABIN7551995

### ALDH1A2 Protein (AA 1-518) (His tag)



#### Overview

Quantity:	1 mg
Target:	ALDH1A2
Protein Characteristics:	AA 1-518
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALDH1A2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

#### **Product Details**

Purpose:	Custom-made recombinat ALDH1A2 Protein expressed in mammalien cells.
Sequence:	MTSSKIEMPG EVKADPAALM ASLHLLPSPT PNLEIKYTKI FINNEWQNSE SGRVFPVYNP
	ATGEQVCEVQ EADKADIDKA VQAARLAFSL GSVWRRMDAS ERGRLLDKLA DLVERDRAVL
	ATMESLNGGK PFLQAFYVDL QGVIKTFRYY AGWADKIHGM TIPVDGDYFT FTRHEPIGVC
	GQIIPWNFPL LMFAWKIAPA LCCGNTVVIK PAEQTPLSAL YMGALIKEAG FPPGVINILP
	GYGPTAGAAI ASHIGIDKIA FTGSTEVGKL IQEAAGRSNL KRVTLELGGK SPNIIFADAD
	LDYAVEQAHQ GVFFNQGQCC TAGSRIFVEE SIYEEFVRRS VERAKRRVVG SPFDPTTEQG
	PQIDKKQYNK ILELIQSGVA EGAKLECGGK GLGRKGFFIE PTVFSNVTDD MRIAKEEIFG
	PVQEILRFKT MDEVIERANN SDFGLVAAVF TNDINKALTV SSAMQAGTVW INCYNALNAQ
	SPFGGFKMSG NGREMGEFGL REYSEVKTVT VKIPQKNS Sequence without tag. The proposed
	Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalien cells and purified in one-step affinity chromatography · The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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. > 90 % as determined by Bis-Tris Page, Western Blot Purity: Grade: custom-made **Target Details** ALDH1A2 Target: Alternative Name: ALDH1A2 (ALDH1A2 Products) Background: Retinal dehydrogenase 2 (RALDH 2) (RalDH2) (EC 1.2.1.36) (Aldehyde dehydrogenase family 1 member A2) (ALDH1A2) (Retinaldehyde-specific dehydrogenase type 2) (RALDH(II)),FUNCTION: Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and alltrans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and alltrans-13,14-dihydroretinoate, respectively (PubMed:29240402, PubMed:33565183). Retinoate signaling is critical for the transcriptional control of many genes, for instance it is crucial for initiation of meiosis in both male and female (PubMed:33565183) (Probable). Recognizes retinal as substrate, both in its free form and when bound to cellular retinol-binding protein (By similarity). Can metabolize octanal and decanal, but has only very low activity with benzaldehyde, acetaldehyde and propanal (By similarity). Displays complete lack of activity with citral (By similarity). {ECO:0000250|UniProtKB:Q63639, ECO:0000269|PubMed:29240402,

ECO:0000269|PubMed:33565183, ECO:0000305|PubMed:22075477}.

#### **Target Details**

Storage Comment:

Expiry Date:

Store at -80°C.

12 months

- Target Details	
Molecular Weight:	56.7 kDa
UniProt:	094788
Pathways:	Retinoic Acid Receptor 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.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C