

Human ALDH1 / ALDH1A1 / ALDC Protein (His Tag)

Catalog Number: 11388-H07E



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

ALDH1A1, RP11-151D14.2, ALDC, ALDH-E1, ALDH1, ALDH11, MGC2318, PUMB1, RALDH1

Protein Construction:

A DNA sequence encoding the human ALDH1A1 (NP_000680.2) (Ser 2-Ser 501) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human ALDH1A1 comprises 507 amino acids and has a predicted molecular mass of 41.5 kDa. It migrates as an approximately 45-50 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, 20% glycerol, 1mM DTT, pH 8.0

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

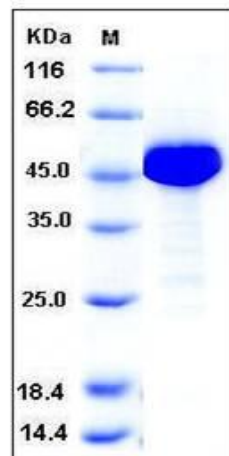
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Retinal dehydrogenase 1, also known as Aldehyde dehydrogenase family 1 member A1, Aldehyde dehydrogenase, cytosolic, ALDH1, ALDH1A1 and ALDC, is a cytoplasm protein which belongs to the aldehyde dehydrogenase family. ALDH1A1 also belongs to the group of corneal crystallins that help maintain the transparency of the cornea. The aldehyde dehydrogenase (ALDH) superfamily represents a divergently related group of enzymes that metabolize a wide variety of endogenous and exogenous aldehydes. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations.

References

1. Hough, RB. 2004, Mol Cell Biol. 24 (3):1324-40.
2. Walsh N, et al., 2008, Journal of proteomics 71 (5): 561-71.
3. Barley K, et al., 2009, Schizophr. Res. 112 (1-3): 54-64.
4. Chen YC, et al., 2009, Biochem. Biophys. Res. Commun. 385 (3): 307-13.
5. Xiao T, et al., 2009, J. Toxicol. Environ. Health Part A 72 (9): 577-84.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>