Datasheet for ABIN7596293

ALDH1A1 Protein (AA 1-501)

Go to Product page

Overview

Quantity:	500 µg
Target:	ALDH1A1
Protein Characteristics:	AA 1-501
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	SDS-PAGE (SDS), Enzyme Activity Assay (EAA)

Product Details

Sequence:	MSSSGTPDLP VLLTDLKIQY TKIFINNEWH DSVSGKKFPV FNPATEEELC QVEEGDKEDV DKAVKAARQA FQIGSPWRTM DASERGRLLY KLADLIERDR LLLATMESMN GGKLYSNAYL NDLAGCIKTL RYCAGWADKI QGRTIPIDGN FFTYTRHEPI GVCGQIIPWN FPLVMLIWKI GPALSCGNTV VVKPAEQTPL TALHVASLIK EAGFPPGVVN IVPGYGPTAG AAISSHMDID KVAFTGSTEV GKLIKEAAGK SNLKRVTLEL GGKSPCIVLA DADLDNAVEF AHHGVFYHQG QCCIAASRIF VEESIYDEFV RRSVERAKKY ILGNPLTPGV TQGPQIDKEQ YDKILDLIES GKKEGAKLEC GGGPWGNKGY FVQPTVFSNV TDEMRIAKEE IFGPVQQIMK FKSLDDVIKR ANNTFYGLSA GVFTKDIDKA ITISSALQAG TVWVNCYGVV SAQCPFGGFK MSGNGRELGE YGFHEYTEVK TVTVKISQKN S
Purity:	> 90% by SDS-PAGE
Endotoxin Level:	< 1 EU per 1ug of protein (determined by LAL method)

Product Details

Biological Activity Comment:	Specific activity is > 700pmol/min/ug, and is defined as the amount of enzyme that catalyze the oxidation of 1.0 pmole propioaldehyde by NAD per minute at pH 8.8 at 37°C.

Target Details

Target:	ALDH1A1
Alternative Name:	Aldehyde Dehydrogenase 1-A1/ ALDH1A1 (ALDH1A1 Products)
Background:	Aldehyde dehydrogenase 1A1 (ALDH1A1), also known as retinal dehydrogenase 1, 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. ALDH1A1 also belongs to the group of corneal crystallins that help maintain the transparency of the cornea. (Retinal + NAD+ + H2O = retinoate + NADH) Recombinant ALDH1A1 protein was expressed in E. coli and purified by using conventional chromatography techniques.
Molecular Weight:	54.8 kDa (501aa) confirmed by MALDI-TOF
NCBI Accession:	NP_000680
Pathways:	Dopaminergic Neurogenesis

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Can be stored at +2°C to +8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.