

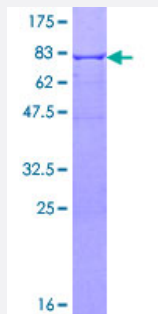
Full-Length

ALDH1A1 (Human) Recombinant Protein (P02)

Catalog # H00000216-P02

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ALDH1A1 full-length ORF (NP_000680.2, 1 a.a. - 501 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSSSGTPDLPVLLTDLKIYTKIFINNEWHDSVSGKKFPVFNPAEEEELCQVEEGDKEDVDKAVK
AARQAFQIGSPWRTMDASERGRLLYKLADLIERDRLLLATMESMNGGKLYSNAYLNDLAGCIKTLR
YCAGWADKIQGR TIPIDGNFFTYTRHEPIGVCGQIIPWNFPLVMLWKIGPALSCGNTVVVKPAEQTP
LTALHVASLIKEAGFPPGVVNIPGYGPTAGAAISSHMDIDKVAFTGSTEVGKLIKEAAGKSNLKRV
TLELGKSPCMLADADLDNAVEFAHHGVFYHQGCCIAASRIFVEESYDEFVRRSVERAKKYLG
NPLTPGVTQGPQIDKEQYDKILDIESGKKEGAKLECGGGPWGNKGYFVQPTVFSNVTDDEMRIAK
EEIFGPVQQIMKFKSLDDVIKRANNTFYGLSAGVFTKIDKAITISSALQAGTVVWNCYGVVSAQCP
FGGFKMSGNGRELGEYGFHEYTEVKTVTKISQKNS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

81.3

Interspecies Antigen Sequence

Mouse (87); Rat (86)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ALDH1A1

Entrez GeneID	216
GeneBank Accession#	NM_000689.3
Protein Accession#	NP_000680.2
Gene Name	ALDH1A1
Gene Alias	ALDC, ALDH-E1, ALDH1, ALDH11, MGC2318, PUMB1, RALDH1
Gene Description	aldehyde dehydrogenase 1 family, member A1
Gene Ontology	Hyperlink
Gene Summary	This protein belongs to the aldehyde dehydrogenases family of proteins. 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. Most Caucasians have two major isozymes, while approximately 50% of Orientals have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of the mitochondrial isozyme. This gene encodes a cytosolic isoform, which has a high affinity for aldehydes. [provided by RefSeq]
Other Designations	ALDH class 1 acetaldehyde dehydrogenase 1 aldehyde dehydrogenase 1, soluble aldehyde dehydrogenase 1A1 aldehyde dehydrogenase, liver cytosolic retinal dehydrogenase 1 retinaldehyde dehydrogenase 1

Pathway

- [Metabolic pathways](#)
- [Retinol metabolism](#)

Disease

- [Alcoholism](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Chromosome Deletion](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Disease Models](#)
- [Drug Toxicity](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Schizophrenia](#)
- [Tobacco Use Disorder](#)