

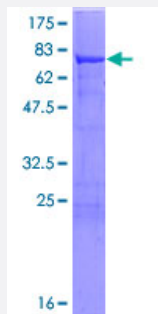
Full-Length

ALDH7A1 (Human) Recombinant Protein (P01)

Catalog # H00000501-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ALDH7A1 full-length ORF (NP_001173.1, 1 a.a. - 511 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSTLLINQPQYAWLKELGLREENEGVYNGSWGGRGEVITTYCPANNEPIARVRQASVADYEETVK
KAREAWKIWADIPAPKRGEMRQIGDALREKIQVLGSLVSEMGKILVEGVGEVQEYVDICDYAVGL
SRMIGGPILPSERSGHALIEQWNPVGLVGIIAFNFPVAVYGWNNAIAMICGNVCLWKGAPTTSLISV
AVTKIAKVLEDNKLPGAICSLTCGGADIGTAMAKDERVNLLSFTGSTQVGKQVGLMVQERFGRSL
LELGNNAIIFEDADLSLVVPSALFAAVGTAGQRCCTARRLFHESIHDEVVNRLKKAYAQIRVGN
PWDPNVLYGPLHTKQAVSMFLGAVEEAKKEGGTVVYGGKVMGRPKNYVEPTVTGLGHDASIAH
TETFAPILYVFKFKNEEEVFAWNNEVKQGLSSSIFTKDLGRIFRWLGPKGSDCGIVNVNIPTSGAEI
GGAFGGEKHTGGGRESGSDAWKQYMRRSTCTINYSKDLPLAQGIKFQ

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

81.8

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 — ALDH7A1

Entrez GeneID[501](#)**GeneBank Accession#**[NM_001182.2](#)**Protein Accession#**[NP_001173.1](#)**Gene Name**

ALDH7A1

Gene Alias

ATQ1, EPD, FLJ11738, FLJ92814, PDE

Gene Description

aldehyde dehydrogenase 7 family, member A1

Omim ID[107323](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

Antiquitin is a member of subfamily 7 in the aldehyde dehydrogenase gene family. These enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. This particular member has homology to a previously described protein from the green garden pea, the 26g pea turgor protein. Mutations in this gene cause pyridoxine-dependent epilepsy, which involves a combination of various seizure types and is responsive to immediate administration of pyridoxine hydrochloride. Four additional human antiquitin-like sequences, all of which are pseudogenes, have also been identified. [provided by RefSeq]

Other Designations

26g turgor protein homolog|P6c dehydrogenase|alpha-AASA dehydrogenase|alpha-amino adipic semialdehyde dehydrogenase|antiquitin 1|delta1-piperidine-6-carboxylate dehydrogenase

Pathway

- [3-Chloroacrylic acid degradation](#)
- [Arginine and proline metabolism](#)
- [Ascorbate and aldarate metabolism](#)
- [beta-Alanine metabolism](#)
- [Butanoate metabolism](#)
- [Fatty acid metabolism](#)
- [Glycerolipid metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Histidine metabolism](#)
- [Limonene and pinene degradation](#)
- [Lysine degradation](#)
- [Metabolic pathways](#)
- [Propanoate metabolism](#)
- [Pyruvate metabolism](#)
- [Tryptophan metabolism](#)
- [Valine](#)

Disease

- [Diabetes Mellitus](#)
- [Genetic Predisposition to Disease](#)
- [Osteoporosis](#)