

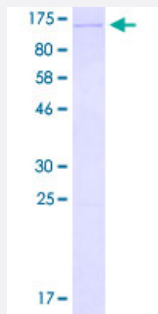
Full-Length

ALDH18A1 (Human) Recombinant Protein (P01)

Catalog # H00005832-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ALDH18A1 full-length ORF (ADR83253.1, 1 a.a. - 795 a.a.) recombinant protein with GST tag at N-terminal.

Sequence

MLSQVYRCGFQPFNQHLLPWVKCTTVFRSHCIQPSVIRHVRWSNIPFITVPLSRTHGKSFAHRSE
LKHAKRIVVKLGSAVVTRGDECGLALGRLASVEQSVLQNGREMMLVTSGAVAFGKQRLRHEI
LLSQSVRQALHSGQNQLKEMAIPLVLEARACAAAGQSGLMALYEAMFTQYSICAAQILVTNDFHD
EQKRRNLNGTLHELLRMNIVPNTNDVPPAEPNSDLQGVNVISVKDNDSLAARLAVEMKTDLL
MLSDVEGLFDSPPGSDDAKLIDIFYPGDQQSVTFGTCSRVMGGMGMEAKVKAALWALQGGTSVVI
ANGTHPKVSGHVITDIVEGKKVGTFFSEVKPAGPTVEQQGEMARSGGRMLATLEPEQRAEIIHHLA
DLLTDQRDEILLANKKDLEEAEGRLAAPLLKRLSLSTSKLNSLAIGLRQIAASSQDSVGRVLRRTRI
AKNLELEQVTVPIGVLLVIFESRPDCLPQVAALAIASGNGLLLKGGKEAAHSNRILHLLTQEALSIHG
VKEAVQLVNTREEVEDLCRLDKMIDLIIPRGSSQLVRDIQKAAKGIPVMGHSEGICHMYVDSEASV
DKVTRLVRDSKCEYPAACNALETLLIHRDLLRTPLFDQIIDMLRVEQVKIHAGPKFASYLTFSPSEV
KSLRTEYGDLELCIEVVDNVQDAIDHIIHKYGSSHTDVMTEDENTAEFFLQHVDSACVFWNASTRF
SDGYRFGGLGAEVGISTSRIHARGPVGLEGLLTKWLLRGKDHVVSDFSEHGSLKYLHENLPIQQRN
TN

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

113.9

Interspecies Antigen Sequence

Mouse (96); Rat (95)

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 — ALDH18A1

Entrez GeneID	5832
GeneBank Accession#	HQ258499.1
Protein Accession#	ADR83253.1
Gene Name	ALDH18A1
Gene Alias	GSAS, MGC117316, P5CS, PYCS
Gene Description	aldehyde dehydrogenase 18 family, member A1
Omim ID	138250
Gene Ontology	Hyperlink

Gene Summary

This gene is a member of the aldehyde dehydrogenase family and encodes a bifunctional ATP- and NADPH-dependent mitochondrial enzyme with both gamma-glutamyl kinase and gamma-glutamyl phosphate reductase activities. The encoded protein catalyzes the reduction of glutamate to delta1-pyrroline-5-carboxylate, a critical step in the de novo biosynthesis of proline, ornithine and arginine. Mutations in this gene lead to hyperammonemia, hypornithinemia, hypocitrullinemia, hypogarginemia and hypoprolinemia and may be associated with neurodegeneration, cataracts and connective tissue diseases. Alternatively spliced transcript variants, encoding different isoforms, have been described for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000020159|OTTHUMP00000020160|delta1-pyrroline-5-carboxylate synthetase|glutamate gamma-semialdehyde synthetase|pyrroline-5-carboxylate synthetase|pyrroline-5-carboxylate synthetase|pyrroline-5-carboxylate synthetase (glutamate gamma-semialdehyde sy

Pathway

- [Arginine and proline metabolism](#)

Disease

- [Alzheimer Disease](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Tobacco Use Disorder](#)