

Product datasheet for TP309948L

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

ALDH7A1 (NM 001182) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human aldehyde dehydrogenase 7 family, member A1 (ALDH7A1), 1

mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC209948 representing NM_001182

or AA Sequence: Red=Cloning site Green=Tags(s)

MSTLLINQPQYAWLKELGLREENEGVYNGSWGGRGEVITTYCPANNEPIARVRQASVADYEETVKKAREA WKIWADIPAPKRGEIVRQIGDALREKIQVLGSLVSLEMGKILVEGVGEVQEYVDICDYAVGLSRMIGGPI LPSERSGHALIEQWNPVGLVGIITAFNFPVAVYGWNNAIAMICGNVCLWKGAPTTSLISVAVTKIIAKVL EDNKLPGAICSLTCGGADIGTAMAKDERVNLLSFTGSTQVGKQVGLMVQERFGRSLLELGGNNAIIAFED ADLSLVVPSALFAAVGTAGQRCTTARRLFIHESIHDEVVNRLKKAYAQIRVGNPWDPNVLYGPLHTKQAV SMFLGAVEEAKKEGGTVVYGGKVMDRPGNYVEPTIVTGLGHDASIAHTETFAPILYVFKFKNEEEVFAWN NEVKQGLSSSIFTKDLGRIFRWLGPKGSDCGIVNVNIPTSGAEIGGAFGGEKHTGGGRESGSDAWKQYMR

RSTCTINYSKDLPLAQGIKFQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 55.2 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001173

Locus ID: 501

 UniProt ID:
 P49419

 RefSeq Size:
 1896

 Cytogenetics:
 5q23.2

 RefSeq ORF:
 1533

Synonyms: ATQ1; EPD; PDE

Summary: The protein encoded by this gene 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. It is also involved in lysine catabolism that is known to occur in the mitochondrial

matrix. Recent reports show that this protein is found both in the cytosol and the

mitochondria, and the two forms likely arise from the use of alternative translation initiation sites. An additional variant encoding a different isoform has also been found for this gene. Mutations in this gene are associated with pyridoxine-dependent epilepsy. Several related

pseudogenes have also been identified. [provided by RefSeq, Jan 2011]

Protein Families: Druggable Genome

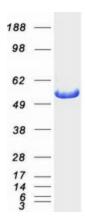
Protein Pathways: Arginine and proline metabolism, Ascorbate and aldarate metabolism, beta-Alanine

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, leucine and isoleucine degradation

Product images:



Coomassie blue staining of purified ALDH7A1 protein (Cat# [TP309948]). The protein was produced from HEK293T cells transfected with ALDH7A1 cDNA clone (Cat# [RC209948]) using MegaTran 2.0 (Cat# [TT210002]).