

## Product datasheet for **TP309948**

### ALDH7A1 (NM\_001182) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human aldehyde dehydrogenase 7 family, member A1 (ALDH7A1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC209948 representing NM_001182 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MSTLLINQPQYAWLKELGLREENEGVYNGSWGGRGEVITTYCPANNEPIARVRQASVADYEETVKKAREA  
WKIWADIPAPKRGEIVRQIGDALREKIQVLGSLVSLEMGKILVEGVGEVQEYVDICDYAVGLSRMIGGPI  
LPSERSGHALIEQWNPVGLVGIITAFNFPVAVYGWNNAIAMICGNVCLWKGAPTTSLISVAVTKIIAKVL  
EDNKLPGAICSLTCGGADIGTAMAKDERVNLLSFTGSTQVGKQVGLMVQERFGRSLELGGNNAIIFED  
ADLSLVPSALFAAVGTAGQRCTTARRLFIHESIHDEVNRLKKAYAQIRVGNPWDPNVLYGPLHTKQAV  
SMFLGAVEEAKKEGGTVVYGGKVMDRPGNYVEPTIVTGLGHDASIAHTETTFAPILYVFKFKNEEEVFAWN  
NEVKQGLSSSIFTKDLGRIFRWLGPKGSDCGIVNVNIPTSGAEIGGAFGGEKHTGGGREGSDAWKQYMR  
RSTCTINYSKDLPLAQGIKQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

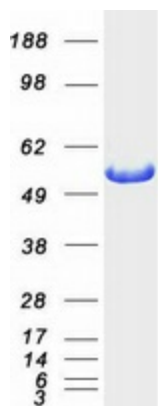
Tag:	C-Myc/DDK
Predicted MW:	55.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity 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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<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001173</a>
<b>Locus ID:</b>	501
<b>UniProt ID:</b>	<a href="#">P49419</a>
<b>RefSeq Size:</b>	1896
<b>Cytogenetics:</b>	5q23.2
<b>RefSeq ORF:</b>	1533
<b>Synonyms:</b>	ATQ1; EPD; PDE
<b>Summary:</b>	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]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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]).