

## Product datasheet for **TP320893**

### ALDH4A1 (NM\_003748) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human aldehyde dehydrogenase 4 family, member A1 (ALDH4A1), nuclear gene encoding mitochondrial protein, transcript variant P5CDhL, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC220893 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MLLPAPALRRALLSRPWTGAGLRWKHTSSLKVANEPVLAFTQGSPERDALQKALKDLKGRMEAIPCVVGDEEVWTSQVQVSPFNHGKVKVAKFCYADKSLNKAIEAALAARKEWDLKPIADRAQIFLKAADMLSGPRRAEILAKTMVGGQKTVIQAEIDAAELIDFFRFNAKYAVELEGQQPISVPPSTNSTVYRGLEGFVAAISPFNFTAIGGNLAGAPALMGNVWLKPSDTAMLASYAVYRILREAGLPPNIIQFVPADGPLFGDVTSSSEHLGGINFTGSVPTFKHLWKQVAQNDRFHTFPRLAGECGGKNFHFVHRSADVSVSGTLRSAPFEYGGQKCSACSRLYVPHSLWPQIKGRLLSEHSRIKVGDPADDFGTFSSAVIDAKSFARIKKWLEHARSSPSLTILAGGKCDDSVGYFVEPCIVESKDPQEPIMKEEIFGPVLSVYVYPDDKYKETLQLVDSTTSYGLTGAVFSQDKDVMQEATKVLRNAAGNFYINDKSTGSIVGQQPFGGARASGTNDKPGPHYILRWTSPPQVIKETHKPLGDWSYAYMQ

**SGP**TRTRPLE**QKLISEEDLAANDILDYKDDDDK**V

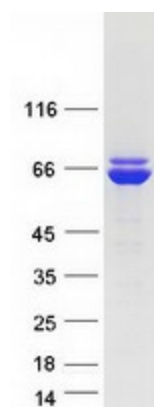
Tag:	C-Myc/DDK
Predicted MW:	59 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity 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_003739</a>
<b>Locus ID:</b>	8659
<b>UniProt ID:</b>	<a href="#">P30038</a> , <a href="#">A0A024RAC7</a>
<b>RefSeq Size:</b>	3399
<b>Cytogenetics:</b>	1p36.13
<b>RefSeq ORF:</b>	1689
<b>Synonyms:</b>	ALDH4; P5CD; P5CDh
<b>Summary:</b>	This protein belongs to the aldehyde dehydrogenase family of proteins. This enzyme is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Deficiency of this enzyme is associated with type II hyperprolinemia, an autosomal recessive disorder characterized by accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2009]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways

### Product images:



Coomassie blue staining of purified ALDH4A1 protein (Cat# TP320893). The protein was produced from HEK293T cells transfected with ALDH4A1 cDNA clone (Cat# [RC220893]) using MegaTran 2.0 (Cat# [TT210002]).