

Product datasheet for PH320893

ALDH4A1 (NM_003748) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ALDH4A1 MS Standard C13 and N15-labeled recombinant protein (NP_003739)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220893
Predicted MW:	61.7 kDa
Protein Sequence:	>RC220893 protein sequence Red=Cloning site Green=Tags(s)

MLLPAPALRRALLSRPWTGAGLRWKHTSSLKVANEPVLAFTQGS PERDALQKALKDLKGRMEAI PCVVGD
EEVWTS DVQYQVSPFNHGHKVAKFCYADKSLLNKAIEAALAARKEWDLKPIADRAQIFLKAADMLSGPRR
AEILAKTMVGQGKTVIQAEIDAAAELIDFFRFNAKYAVELEGQQPISVPPSTNSTVYRGLGEGFVAAISPF
NFTAIGGNLAGAPALMGNVVLWKPSDTAMLASYAVYRILREAGLPPNIIQFVFPADGFLFGDVTVSSEHLC
GINFTGSVPTFKHLWKQVAQNDRFHTFPRLAGECGGKNFHFVHRSADVESVVSGLTRSAFEYGGQKCSA
CSRLYVPHSLWPQIKGRLL EEHSRIKVGDP AEDFGTFFSAVIDAKSFARIKKWLEHARSSPSLTILAGGK
CDDSVGYFVEPCIVESKDPQEPIMKEEIFGPVLSVYVYPDDKYKETLQLVDSTTSYGLTGAVFSQDKD VV
QEATKVL RNAAGNFYINDKSTGSI VGGQPF GGARASGTNDKPGGPHYILRWTSPQVIKETHKPLGDWSYA
YMQ

SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_003739
RefSeq Size:	3399
RefSeq ORF:	1689



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Synonyms: ALDH4; P5CD; P5CDh

Locus ID: 8659

UniProt ID: [P30038](#), [A0A024RAC7](#)

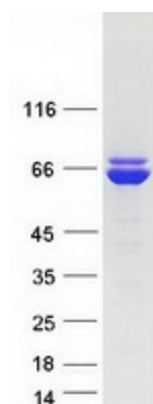
Cytogenetics: 1p36.13

Summary: 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]

Protein Families: Druggable Genome

Protein Pathways: 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]).