

Product datasheet for PH300723

ALDH1A1 (NM_000689) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ALDH1A1 MS Standard C13 and N15-labeled recombinant protein (NP_000680)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200723
Predicted MW:	54.7 kDa
Protein Sequence:	>RC200723 representing NM_000689 Red=Cloning site Green=Tags(s)

MSSSGTPDLPVLLTDLKIQYTKIFINNEWHDSVSGKKFPVFNPAEEELCQVEEGDKEDVDKAVKAARQA
FQIGSPWRTMDASERGRLLYKLAADLIERDRLLLATMESMNGGKLYSNAYLNDLAGCIKTLRYCAGWADKI
QGRITPIDGNFFTYTRHEPIGVCQIIPWNFPLVMLIWKIGPALSCGNTVVVKPAEQTPLTALHVASLIK
EAGFPPGVVNIIVPGYPTAGAAISSHMDIDKVAFTGSTEVGKLIKEAAGKSNLKRVTLELGGKSPCIVLA
DADLDNAVEFAHHGVFYHQGCCIAASRIFVEESIYDEFVRRSVERAKKYILGNPLTPGVTQGPQIDKEQ
YDKILDLIESGKKEGAKLECGGGPWGNKGYFVQPTVFSNVTDDEMRIAKEEIFGPPVQIMKFKSLDDVIKR
ANNTFYGLSAGVFTKDIDKAITISSALQAGTVWVNCYGVVSAQCPFGGFKMSGNGRELGEYGFHEYTEVK
TDTVVKISQKNS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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_000680
RefSeq Size:	2116
RefSeq ORF:	1503



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Synonyms: ALDC; ALDH-E1; ALDH1; ALDH11; HEL-9; HEL-S-53e; HEL12; PUMB1; RALDH1

Locus ID: 216

UniProt ID: [P00352](#), [V9HW83](#)

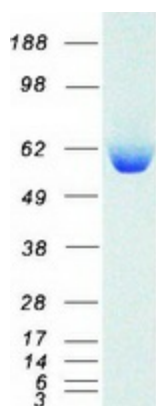
Cytogenetics: 9q21.13

Summary: The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene encodes the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, this gene may also be involved in the regulation of the metabolic responses to high-fat diet. [provided by RefSeq, Mar 2011]

Protein Families: Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways: Metabolic pathways, Retinol metabolism

Product images:



Coomassie blue staining of purified ALDH1A1 protein (Cat# [TP300723]). The protein was produced from HEK293T cells transfected with ALDH1A1 cDNA clone (Cat# [RC200723]) using MegaTran 2.0 (Cat# [TT210002]).