

## Active Recombinant Human ALDH2 protein

Cat. No. ALDH2-139H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human ALDH2(18-517aa) was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	18-517 a.a.
<b>Description</b>	<p>ALDH2 (Aldehyde dehydrogenase 2 family) belongs to the aldehyde dehydrogenase family which catalyze the chemical transformation from acetaldehyde to acetic acid and is the second enzyme of the major oxidative pathway of alcohol metabolism.</p> <p>There are two major liver isoforms of this enzyme, cytosolic and mitochondrial, and they can be also distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations.</p>
<b>Form</b>	Liquid. In 20 mM Tris-HCl buffer (pH 7.5) containing 1mM DTT, 1 mM EDTA, 10% glycerol
<b>Bio-activity</b>	Specific activity is > 250pmol/min/ug, and was obtained by measuring the increase of NADH in absorbance at 340 nm resulting from the reduction of NAD at pH 8.0 at 25 centigrade.
<b>Molecular Mass</b>	54.5 kDa (501aa), confirmed by MALDI-TOF.
<b>AA Sequence</b>	MSAAATQAVP APNQQPEVFC NQIFINNEWH DAVSRKTFPT VNPSTGEVIC

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

QVAEGDKEDV DKAVKAARAA FQLGSPWRRM DASHRGRLNRLADLIERDR  
 TYLAALETLD NGKPYVISYL VLDLDMVLKCL RYYAGWADKY HGKTIPIDGD  
 FFSYTRHEPV GVCQGQIIPWN FPLLMQAWKLGALATGNVV VMKVAEQTPL  
 TALYVANLIK EAGFPPGVVN IVPFGGPTAG AAIASHEDVD KVAFTGSTEI  
 GRVIQVAAGS SNLKRVTLLEGGKSPNIIMS DADMDWAVEQ AHFALFFNQG  
 QCCCAGSRTF VQEDIYDEFV ERSVARAKSR VVGPNFDSKT EQGPQVDETQ  
 FKKILGYINTGKQEGAKLLC GGGIAADRGY FIQPTVFGDV QDGMTIAKEE  
 IFGPVMQILK FKTIEEVVGR ANNSTYGLAA AVFTKDLDKA  
 NYLSQALQAGTVWVNCYDVF GAQSPFGGYK MSGSGRELGE YGLQAYTEVK  
 TVTVKVPQKN S

**Endotoxin** < 1.0 Eu per 1 microgram of protein (determined by LAL method)

**Purity** > 90% by SDS - PAGE

**Storage** Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

**Concentration** 1 mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** [ALDH2 aldehyde dehydrogenase 2 family \(mitochondrial\) \[ Homo sapiens \]](#)

**Official Symbol** [ALDH2](#)

**Synonyms** ALDH2; aldehyde dehydrogenase 2 family (mitochondrial); aldehyde dehydrogenase, mitochondrial; ALDH class 2; liver mitochondrial ALDH; acetaldehyde dehydrogenase 2; nucleus-encoded mitochondrial aldehyde dehydrogenase 2; ALDM; ALDHI; ALDH-E2; MGC1806;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Gene ID</b>	217
<b>mRNA Refseq</b>	NM_000690
<b>Protein Refseq</b>	NP_000681
<b>MIM</b>	100650
<b>UniProt ID</b>	P05091
<b>Chromosome Location</b>	12q24.12
<b>Pathway</b>	Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Ascorbate and aldarate metabolism, organism-specific biosystem; Ascorbate and aldarate metabolism, conserved biosystem; Biological oxidations, organism-specific biosystem; Ethanol oxidation, organism-specific biosystem; Fatty Acid Omega Oxidation, organism-specific biosystem;
<b>Function</b>	aldehyde dehydrogenase (NAD) activity; aldehyde dehydrogenase [NAD(P)+] activity; electron carrier activity; oxidoreductase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA