

## Human Recombinant ALDH2

**CATALOG #:** 6332-100 100 µg

**ALTERNATE NAMES:** Aldehyde dehydrogenase - mitochondrial, ALDH-E2, ALDHI, ALDM.

**SOURCE:** E.Coli

**PURITY:** > 90% by SDS - PAGE

**MOL. WEIGHT:** 54.5 kDa (501 aa, 18-517 aa)

**ENDOTOXIN LEVEL:** < 1.0 EU per 1 µg of protein (determined by LAL method).

**FORMULATION:** 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 7.5) containing 1 mM DTT, 1 mM EDTA and 10% glycerol.

### STORAGE CONDITIONS:

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

### DESCRIPTION:

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. 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. ALDH2 has been shown to interact with GroEL.

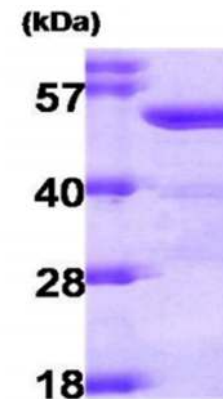
### AMINO ACID SEQUENCE:

MSAAATQAVP APNQQPEVFC NQIFINNEWH DAVSRKTFPT VNPSTGEVIC  
 QVAEGDKEDV DKAVKAARAA FQLGSPWRRM DASHRGRLLN RLADLIERDR  
 TYLAALETLD NGKPYVISYL VDLDMVLKCL RYYAGWADKY HGKTIPIIDGD FFSYTRHEPV  
 GVCGQIIPWN FPLLMQAWKL GPALATGNVV VMKVAEQTPL TALYVANLIK EAGFPPGVVN  
 IVPFGPTAG AAIASHEDVD KVAFTGSTEI GRVIQVAAGS SNLKRVTLLEL GGKSPNIIMS  
 DADMDWAVEQ AHFALFFNQG QCCAGSRTF VQEDIYDEFV ERSVARAKSR  
 VVGPNPFDSTK EQGPQVDETQ FKKILGYINT GKQEGAKLLC GGGIAADRGY FIQPTVFGDV  
 QDGMTIAKEE IFGPVMQILK FKTIEEVVGR ANNSTYGLAA AVFTKDLDKA NYLSQALQAG

TWVWNCYDVF GAQSPFGGYK MSGSGRELGE YGLQAYTEVK TVTVKVPQKN S

### BIOLOGICAL ACTIVITY:

Specific activity is > 0.14 units/ml, and was obtained by measuring the increase of NADP in absorbance at 340 nm resulting from the reduction of NAD. One unit will oxidize 1.0 µmole of acetaldehyde to acetic acid per minute at pH 8.0 at 25°C in the presence of beta-NAD, potassium and thiols.



15% SDS-PAGE (3µg)

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### RELATED PRODUCTS:

- Aldehyde Dehydrogenase Activity Colorimetric Assay kit (Cat. No. K731-100)
- PicoProbe™ Aldehyde Dehydrogenase Activity Assay kit (Cat. No. K741-100)
- Human recombinant ALDH3A1 (Cat. No. 6333-50)
- Human recombinant AKR7A3 (Cat. No. 6334-50)
- Human recombinant AKR7A2 (Cat. No. 6335-50)
- Human recombinant AKR1C1 (Cat. No. 6336-50)
- Human recombinant AKR1C3 (Cat. No. 6337-50)
- Human recombinant AKR1C4 (Cat. No. 6338-50)
- Human recombinant AKR1B10 (Cat. No. 6339-50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

