

## Recombinant Human ALDH4A1 cell lysate

**Cat. No.** ALDH4A1-434HCL    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Human ALDH4A1 derived in Baculovirus-Insect cells. The whole cell lysate is provided in 1X Sample Buffer. Browse all transfected cell lysate positive controls
<b>Species</b>	Human
<b>Source</b>	Insect Cells
<b>Preparation method</b>	Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer with cocktail of protease inhibitors. Cell debris was removed by centrifugation and then centrifuged to clarify the lysate. The cell lysate was boiled for 5 minutes in 1 x SDS sample buffer (50 mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized.
<b>Lysis buffer</b>	Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF
<b>Quality control Testing</b>	12.5% SDS-PAGE Stained with Coomassie Blue
<b>Recommended Usage</b>	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube. 2. Re-dissolve the pellet using 200µL pure water and boiled for 2-5 min. 3. Store it at -80°C. Recommend to aliquot the cell lysate into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles. Notes: The lysate is ready to load on SDS-PAGE for Western blot application. If dissociating conditions are required, add

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reducing agent prior to heating.

**Stability**

Samples are stable for up to twelve months from date of receipt at -80°C

**Storage Buffer**

50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF

**Storage Instruction**

Lysate samples are stable for 12 months from date of receipt when stored at -80°C. Avoid repeated freeze-thaw cycles. Prior to SDS-PAGE fractionation, boil the lysate for 5 minutes.

## GENE INFORMATION

**Gene Name**

[ALDH4A1 aldehyde dehydrogenase 4 family, member A1 \[ Homo sapiens \]](#)

**Official Symbol**

ALDH4A1

**Synonyms**

ALDH4A1; aldehyde dehydrogenase 4 family, member A1; ALDH4; delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial; P5CDh; P5C dehydrogenase; aldehyde dehydrogenase family 4 member A1; mitochondrial delta-1-pyrroline 5-carboxylate dehydrogenase; P5CD; DKFZp779M035;

**Gene ID**

[8659](#)

**mRNA Refseq**

[NM\\_001161504](#)

**Protein Refseq**

[NP\\_001154976](#)

**MIM**

[606811](#)

**UniProt ID**

[P30038](#)

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<b>Chromosome Location</b>	1p36
<b>Pathway</b>	4-hydroxyproline degradation I, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, conserved biosystem; Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem;
<b>Function</b>	1-pyrroline-5-carboxylate dehydrogenase activity; aldehyde dehydrogenase (NAD) activity; electron carrier activity; oxidoreductase activity;

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