



# Recombinant Mouse Aldehyde dehydrogenase, dimeric NADP-preferring (Aldh3a1)

<b>Product Code</b>	CSB-YP001572MO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P47739
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>           SNISSIVNR ARDAFNSGKT RPLQFRVEQL EALQRMINEN LKGISKALAS            NLRKNEWTSY YEEVAHVLDE IDFTIKGLSD WAEDEPVAKT RQTQEDDLI            HSEPLGVVLV IGAWNYPFNL TIQPMVGAIA AGNAVVLKPS EVSDHMADLL            STLIPQYMDK DLYPVIKGGV PETTELLKEK FDHIMYTGST AVGKIVMAAA            AKHLTPVTLE LGGKSPCYVD KDCDLDVACR RIAWGKFMNS GQTCVAPDYI            LCDPSIQNEI VEKLLKSLKD FYGEDAKQSH DYGRIINDRH FQRVINLIDS            KKVAHGGTWD QPSRYIAPTI LVDVDPQSPV MQEEIFGPVM PIVCVRSLDE            AIKFINQREK PLALYVFSNN DKVIKKMIAE TSSGGVTAND VIVHITVPTL            PFGGVGNSGM GAYHGKKSFE TFSHRRSCLV RSLRNEEANK            ARYPPSPAKM PRH         </p>
<b>Source</b>	Yeast
<b>Target Names</b>	Aldh3a1
<b>Protein Names</b>	Recommended name: Aldehyde dehydrogenase, dimeric NADP-preferring EC=1.2.1.5 Alternative name(s): Aldehyde dehydrogenase 4 Aldehyde dehydrogenase family 3 member A1 Dioxin-inducible aldehyde dehydrogenase 3
<b>Expression Region</b>	2-453
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. The enzyme encoded by this gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified.



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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.