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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# ALDH2 (m): 293T Lysate: sc-118342

## BACKGROUND

Aldehyde dehydrogenases (ALDHs) mediate NADP<sup>+</sup>-dependent oxidation of aldehydes into acids during detoxification of alcohol-derived acetaldehyde; lipid peroxidation; and metabolism of corticosteroids, biogenic amines and neurotransmitters. ALDH1A1, also designated retinal dehydrogenase 1 (RALDH1 or RALDH1); aldehyde dehydrogenase family 1 member A1; aldehyde dehydrogenase cytosolic; ALDHII; ALDH-E1 or ALDH E1, is a retinal dehydrogenase that participates in the biosynthesis of retinoic acid (RA). The major liver isoform ALDH1 localizes to cytosolic space, while ALDH2 localizes to the mitochondria. The ALDH1A2 (RALDH2, RALDH2-T) gene produces three different transcripts and also catalyzes the synthesis of RA from retinaldehyde. ALDH2 is present in most Caucasians, yet is absent in 50% of Asians. The absence of this enzyme has been linked to alcohol intolerance and thusly, a reduced risk for alcoholism-related liver disease.

## REFERENCES

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5. Lin, M., et al. 2000. cDNA cloning and expression of a human aldehyde dehydrogenase (ALDH) active with 9-cis-retinal and identification of a rat ortholog, ALDH12. *J. Biol. Chem.* 275: 40106-40112.
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7. Vasiliou, V. and Nebert, D.W. 2005. Analysis and update of the human aldehyde dehydrogenase (ALDH) gene family. *Hum. Genomics* 2: 138-143.
8. Westerlund, M., et al. 2005. Tissue- and species-specific expression patterns of class I, III, and IV ADH and ALDH 1 mRNAs in rodent embryos. *Cell Tissue Res.* 322: 227-236.
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## CHROMOSOMAL LOCATION

Genetic locus: Aldh2 (mouse) mapping to 5 F.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

ALDH2 (m): 293T Lysate represents a lysate of mouse ALDH2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

ALDH2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ALDH2 antibodies. Recommended use: 10-20 µl per lane. Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.