



Rabbit Anti-ALDH3A2 antibody

SL11797R

Product Name:	ALDH3A2
Chinese Name:	脂肪醛脱氢酶抗体
Alias:	Ahd 3; Ahd 3r; Ahd3; Ahd3 r; AL3A2_HUMAN; Aldehyde dehydrogenase 10; Aldehyde dehydrogenase 3; Aldehyde dehydrogenase 3 family, member A2; Aldehyde dehydrogenase family 3 member A2; Aldehyde dehydrogenase family 3, subfamily A2; Aldehyde dehydrogenase, family 3, subfamily A, member 2; ALDH10; Aldh3; ALDH3A2; Aldh4; Aldh4 r; Aldh4r; FALDH; Fatty aldehyde dehydrogenase; FLJ20851; Microsomal aldehyde dehydrogenase; msALDH; SLS.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ALDH3A2:101-200/485
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Aldehyde dehydrogenases (ALDHs) mediate the NADP ⁺ -dependent oxidation of aldehydes into acids and play an important role in the detoxification of alcohol-derived

acetaldehyde, as well as in lipid peroxidation and in the metabolism of corticosteroids, biogenic amines and neurotransmitters. ALDH3A2 (aldehyde dehydrogenase 3 family, member A2), also known as SLS, FALDH or ALDH10, is a 485 amino acid single-pass membrane protein that localizes to the cytoplasmic side of the endoplasmic reticulum and belongs to the aldehyde dehydrogenase family. Expressed in a variety of tissues, including liver, heart, lung, brain, kidney and placenta, ALDH3A2 catalyzes the NAD⁺-dependent oxidation of long-chain aliphatic aldehydes to fatty acids, a process that is necessary for detoxification and lipid metabolism. Defects in the gene encoding ALDH3A2 are the cause of Sjogren-Larsson syndrome (SLS), an autosomal recessive neurocutaneous disorder characterized by severe mental retardation, seizures and speech defects. Multiple isoforms of ALDH3A2 exist due to alternative splicing events.

Function:

Catalyzes the oxidation of long-chain aliphatic aldehydes to fatty acids. Active on a variety of saturated and unsaturated aliphatic aldehydes between 6 and 24 carbons in length.

Subcellular Location:

Endoplasmic reticulum membrane.

Tissue Specificity:

Defects in ALDH3A2 are the cause of Sjogren-Larsson syndrome (SLS) [MIM:270200]. SLS is an autosomal recessive neurocutaneous disorder characterized by a combination of severe mental retardation, spastic di- or tetraplegia and congenital ichthyosis (increased keratinization). Ichthyosis is usually evident at birth, neurologic symptoms appear in the first or second year of life. Most patients have an IQ of less than 60. Additional clinical features include glistening white spots on the retina, seizures, short stature and speech defects.

DISEASE:

Defects in ALDH3A2 are the cause of Sjogren-Larsson syndrome (SLS) [MIM:270200]. SLS is an autosomal recessive neurocutaneous disorder characterized by a combination of severe mental retardation, spastic di- or tetraplegia and congenital ichthyosis (increased keratinization). Ichthyosis is usually evident at birth, neurologic symptoms appear in the first or second year of life. Most patients have an IQ of less than 60. Additional clinical features include glistening white spots on the retina, seizures, short stature and speech defects.

Similarity:

Belongs to the aldehyde dehydrogenase family.

SWISS:

P51648

Gene ID:

224

Database links:

[Entrez Gene: 224](#)Human

[Entrez Gene: 11671](#)Mouse

[Entrez Gene: 65183](#)Rat

[Oimim: 609523](#)Human

[SwissProt: P51648](#)Human

[SwissProt: P47740](#)Mouse

[SwissProt: P30839](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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