



Rabbit Anti-ALDH9A1 antibody

SL12461R

Product Name:	ALDH9A1
Chinese Name:	γ -氨基丁酸醛脱氢酶抗体
Alias:	4 trimethylaminobutyraldehyde dehydrogenase; 4-trimethylaminobutyraldehyde dehydrogenase; AL9A1_HUMAN; aldehyde dehydrogenase (NAD+); Aldehyde dehydrogenase 9A1; Aldehyde dehydrogenase E3 isozyme; Aldehyde dehydrogenase family 9 member A1; ALDH4; ALDH7; ALDH9; aldh9A1; E3; Gamma aminobutyraldehyde dehydrogenase; Gamma-aminobutyraldehyde dehydrogenase; R aminobutyraldehyde dehydrogenase; R-aminobutyraldehyde dehydrogenase; TMABADH.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	ELISA=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:	54kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ALDH9A1:401-494/494
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. ALDH9A1 (aldehyde dehydrogenase family 9 member A1), also known as E3, ALDH4, ALDH7, ALDH9 or TMABADH, is a 494 amino acid cytoplasmic protein that is highly expressed in adult liver, skeletal muscle, kidney and embryonic brain. ALDH9A1 converts gamma-trimethylaminobutyraldehyde into gamma-butyrobetaine and catalyzes the irreversible oxidation of a broad range of aldehydes to the corresponding acids in a NAD-dependent reaction.

Function:

Converts gamma-trimethylaminobutyraldehyde into gamma-butyrobetaine. Catalyzes the irreversible oxidation of a broad range of aldehydes to the corresponding acids in an NAD-dependent reaction.

Subunit:

Homotetramer.

Subcellular Location:

Cytoplasm.

Tissue Specificity:

High expression in adult liver, skeletal muscle, and kidney. Low levels in heart, pancreas, lung and brain. Expressed in all regions of the brain. Expression levels are variable in the different brain areas, with the highest levels in the spinal cord and the lowest in the occipital pole.

Post-translational modifications:

The N-terminus is blocked.

Similarity:

Belongs to the aldehyde dehydrogenase family.

SWISS:

P49189

Gene ID:

233

Database links:

[Entrez Gene: 223](#)Human

[Entrez Gene: 56752](#)Mouse

[Entrez Gene: 64040](#)Rat

[Oimim: 602733](#)Human

[SwissProt: P49189](#)Human

[SwissProt: Q9JLJ2](#)Mouse

[SwissProt: Q9JLJ3](#)Rat

[Unigene: 2533](#)Human

[Unigene: 330055](#)Mouse

[Unigene: 474999](#)Mouse

[Unigene: 98155](#)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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