

ALDH3A1 Polyclonal Antibody

Catalog No: YT5025

Reactivity: Human;Rat

Applications: WB;ELISA

Target: ALDH3A1

Fields: >>Glycolysis / Gluconeogenesis;>>Histidine metabolism;>>Tyrosine

metabolism;>>Phenylalanine metabolism;>>beta-Alanine

metabolism;>>Metabolism of xenobiotics by cytochrome P450;>>Drug

metabolism - cytochrome P450;>>Metabolic pathways

Gene Name: ALDH3A1

Protein Name: Aldehyde dehydrogenase dimeric NADP-preferring

P30838

P47739

Human Gene Id: 218

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Rat Gene ld: 25375

Rat Swiss Prot No: P11883

Immunogen: The antiserum was produced against synthesized peptide derived from human

ALDH3A1. AA range:236-285

Specificity: ALDH3A1 Polyclonal Antibody detects endogenous levels of ALDH3A1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 50kD

Cell Pathway: Glycolysis / Gluconeogenesis; Histidine metabolism; Tyrosine

metabolism;Phenylalanine metabolism;Metabolism of xenobiotics by cytochrome

P450; Drug metabolism;

Background: 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. [provided by RefSeq, Sep 2008],

Function: catalytic activity: An aldehyde + NAD(P)(+) + H(2)O = an acid +

NAD(P)H.,function:ALDHs play a major role in the detoxification of alcoholderived acetaldehyde. They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. This protein preferentially oxidizes aromatic aldehyde substrates. It may play a role in the

oxidation of toxic aldehydes.,similarity:Belongs to the aldehyde dehydrogenase family.,subunit:Homodimer.,tissue specificity:High levels in stomach, esophagus

and lung; low level in the liver and kidney.,

Subcellular

Location:

Cytoplasm .

Expression: High levels in stomach, esophagus and lung; low level in the liver and kidney.

Sort: 1889

No4: 1

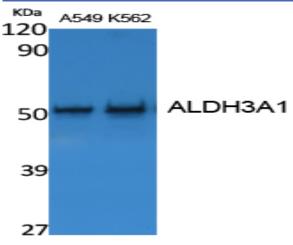
Host: Rabbit

Modifications: Unmodified

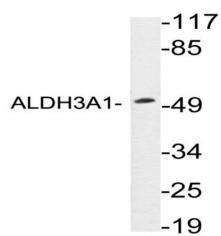
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Western Blot analysis of extracts from A549, K562 cells, using ALDH3A1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from A549 cells, using ALDH3A1 antibody.