

ALDH5A1 Antibody (CT)

Rabbit Polyclonal Antibody Catalog # ABV11301

Specification

ALDH5A1 Antibody (CT) - Product Information

Application WB, IHC Primary Accession P51649

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 57215

ALDH5A1 Antibody (CT) - Additional Information

Gene ID 7915

Positive Control Western blot: SK-BR-3 cell lysate, IHC:

Human hepatocarcinoma.

Application & Usage Western blot: ~1:1000, IHC: ~1:10-1:50.

Other Names

ALDH5A1; SSADH; Succinate-semialdehyde dehydrogenase, mitochondrial; Aldehyde dehydrogenase family 5 members A1; NAD (+)-dependent succinic semialdehyde dehydrogenase.

Target/Specificity

ALDH5A1

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

ALDH5A1 Antibody (CT) is for research use only and not for use in diagnostic or therapeutic procedures.



ALDH5A1 Antibody (CT) - Protein Information

Name ALDH5A1 (HGNC:408)

Synonyms SSADH

Function

Catalyzes one step in the degradation of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA).

Cellular Location

Mitochondrion.

Tissue Location

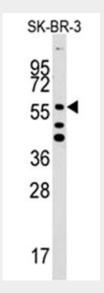
Brain, pancreas, heart, liver, skeletal muscle and kidney. Lower in placenta

ALDH5A1 Antibody (CT) - Protocols

Provided below are standard protocols that you may find useful for product applications.

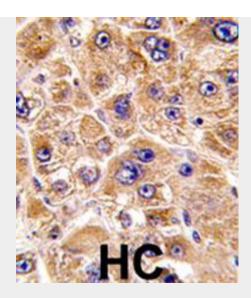
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ALDH5A1 Antibody (CT) - Images



Western blot analysis in SK-BR-3 cell lysates (35 µg/lane).





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ALDH5A1 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

ALDH5A1 Antibody (CT) - Background

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. ALDH5A1 (aldehyde dehydrogenase 5 family, member A1), also known as SSDH or SSADH, is a 535 amino acid protein that localizes to the mitochondria and belongs to the aldehyde dehydrogenase family. Expressed in a variety of tissues, including liver, heart, lung, brain, kidney and placenta, ALDH5A1 is required for gamma-aminobutyric acid (GABA) recycling from the synaptic cleft. Mutations of ALDH5A1 lead to succinate semialdehyde dehydrogenase deficiency (SSADH deficiency) that is characterized by severe ataxia and by mildly retarded psychomotor development.