

**ALDH5A1 Antibody (CT)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11301****Specification**

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**ALDH5A1 Antibody (CT) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P51649</a>
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

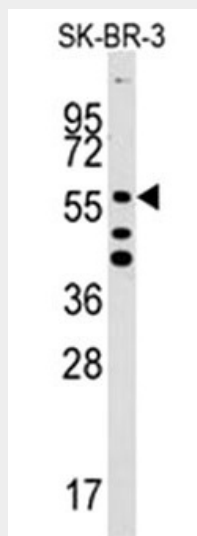
Brain, pancreas, heart, liver, skeletal muscle and kidney. Lower in placenta

## ALDH5A1 Antibody (CT) - Protocols

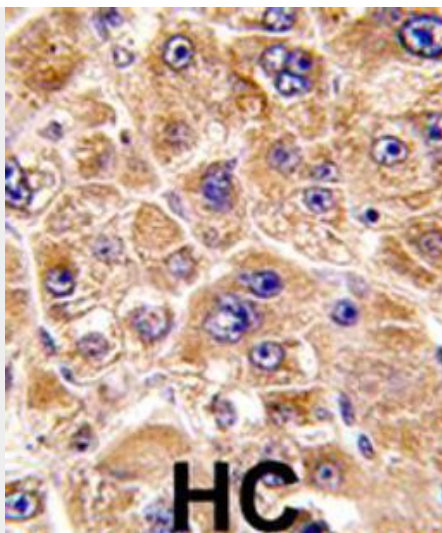
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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<sup>+</sup>-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.