

**Aldh5A1 Antibody**  
**Catalog # ASC10769****Specification**

---

**Aldh5A1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P51649</a>
Other Accession	<a href="#">NP_733936</a> , <a href="#">7915</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Aldh5A1 antibody can be used for detection of Aldh5A1 by Western blot at 0.25 - 0.5 µg/mL.

**Aldh5A1 Antibody - Additional Information**Gene ID **7915****Target/Specificity**

Aldh5A1 antibody was raised against a 22 amino acid synthetic peptide near the carboxy terminus of the human Aldh5A1. <br><br>The immunogen is located within the last 50 amino acids of Aldh5A1.

**Reconstitution & Storage**

Aldh5A1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

Aldh5A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Aldh5A1 Antibody - 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**

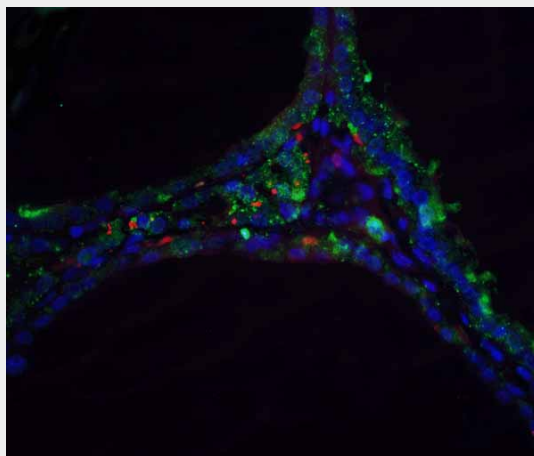
Brain, pancreas, heart, liver, skeletal muscle and kidney. Lower in placenta

## Aldh5A1 Antibody - 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 - Images



Immunofluorescence of DNase II in human spleen tissue with DNase II antibody at 5 µg/ml.

## Aldh5A1 Antibody - Background

**Aldh5A1 Antibody:** Aldh5A1 is a member of the aldehyde dehydrogenase superfamily, a group of NAD(P)(+)-dependent enzymes that catalyze the oxidation of a wide spectrum of aliphatic and aromatic aldehydes. Aldehyde dehydrogenase enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. Aldh5A1 is a mitochondrial NAD(+)-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, results in a disorder of the neurotransmitter 4-aminobutyric acid (GABA). Symptoms usually include static encephalopathy, associated with developmental delays, hypotonia, ataxia, speech defects, and seizures. At least two isoforms of Aldh5A1 are known to exist.

## Aldh5A1 Antibody - References

Vasiliou V and Pappa A. Polymorphisms of human aldehyde dehydrogenases. Consequences for drug metabolism and disease. *Pharmacology*2000; 61:192-8.  
Hearl WG and Churchich JE. Interactions between 4-aminobutyrate aminotransferase and succinic semialdehyde dehydrogenase, two mitochondrial enzymes. *J. Biol. Chem.*1984; 259:11459-63.  
Gibson KM, Sweetman L, Nyhan WL, et al. Succinic semialdehyde dehydrogenase deficiency: an inborn error of gamma-aminobutyric acid metabolism. *Clin. Chim. Acta*1983; 133:33-42.