

Aldh5A1 Antibody
Catalog # ASC10769**Specification**

Aldh5A1 Antibody - Product Information

Application	IF
Primary Accession	P51649
Other Accession	NP_733936 , 7915
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 InformationGene ID **7915****Target/Specificity**

Aldh5A1 antibody was raised against a 22 amino acid synthetic peptide near the carboxy terminus of the human Aldh5A1.

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 InformationName 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

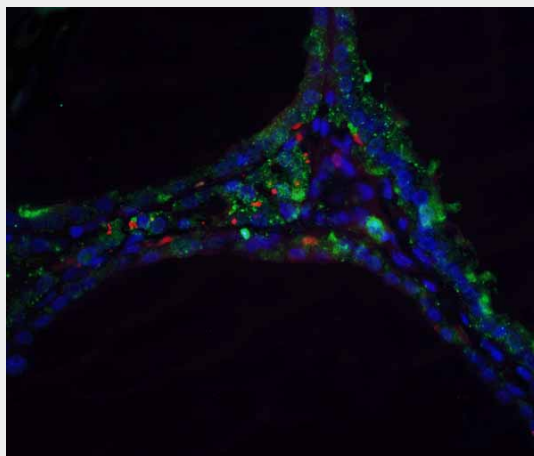
Brain, pancreas, heart, liver, skeletal muscle and kidney. Lower in placenta

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 μ g/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.