10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 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.

The immunogen is located within the last 50 amino acids of Aldh5A1.

Reconstitution & Storage
Aldh5A1 antibody can be stored at 4℃ for three months and -20℃, 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

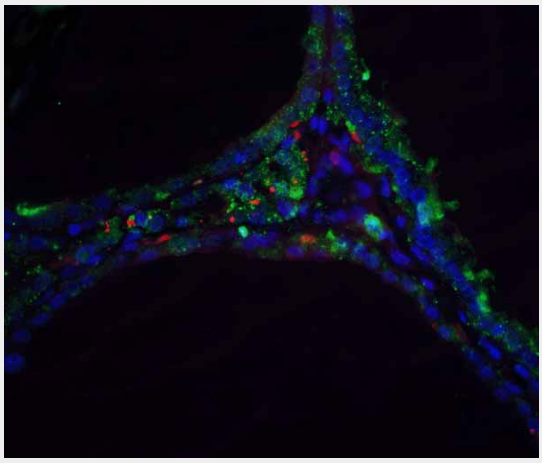
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 Cytomety
- 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. Pharmacology2000; 61:192-8.
Hearl WG and Churchich JE. Interactions between4-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. Acta1983; 133:33-42.