

**ALDH5A1 Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1472d****Specification**

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**ALDH5A1 Antibody - Product Information**

Application	IHC-P, WB, FC,E
Primary Accession	<a href="#">P51649</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57215

**ALDH5A1 Antibody - Additional Information****Gene ID** 7915**Other Names**

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

**Target/Specificity**

This ALDH5A1 antibody is generated from rabbits immunized with human ALDH5A1 recombinant protein.

**Dilution**

IHC-P~~1:50~100

WB~~1:1000

FC~~1:10~50

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**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**

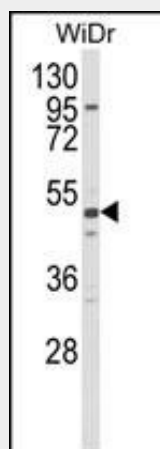
Brain, pancreas, heart, liver, skeletal muscle and kidney. Lower in placenta

### ALDH5A1 Antibody - Protocols

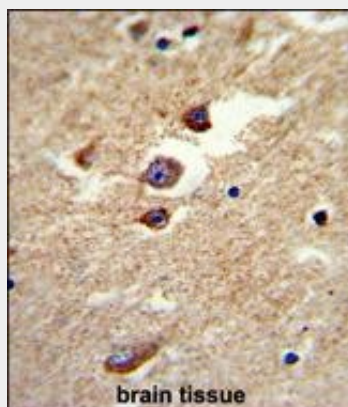
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

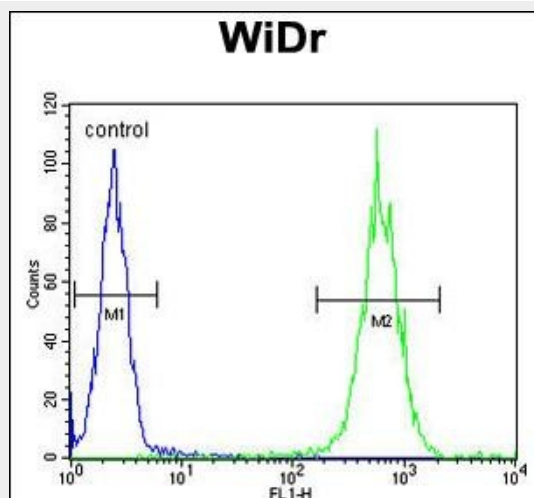
### ALDH5A1 Antibody - Images



Western blot analysis of ALDH5A1 Antibody (Cat. #AP1472d) in WiDr cell line lysates (35ug/lane). ALDH5A1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded brain tissue reacted with ALDH5A1 Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ALDH5A1 Antibody (Cat. #AP1472d) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **ALDH5A1 Antibody - Background**

ALDH5A1 belongs to the aldehyde dehydrogenase family of proteins. This protein functions as a mitochondrial NAD(+)-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, is a rare inborn error in the metabolism of the neurotransmitter 4-aminobutyric acid (GABA). In response to the defect, physiologic fluids from patients accumulate GHB, a compound with numerous neuromodulatory properties.

#### **ALDH5A1 Antibody - References**

Knerr, I., J. Inherit. Metab. Dis. 30 (3), 279-294 (2007) Blasi, P., J. Mol. Evol. 63 (1), 54-68 (2006)  
Plomin, R., Mol. Psychiatry 9 (6), 582-586 (2004)