

ALDH5A1 Antibody

ALTERNATE NAMES: ALDH5A1; SSADH; Succinate-semialdehyde dehydrogenase, mitochondrial; Aldehyde dehydrogenase family 5 members A1; NAD (+)-dependent succinic semialdehyde dehydrogenase.

CATALOG #: 6750-100

AMOUNT: 100 µl

HOST/ISOTYPE: Rabbit IgG

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

PURIFICATION: This antibody is purified through a protein A column, followed by peptide affinity purification.

MOLECULAR WEIGHT: ~57.21 kDa

FORM: Liquid

FORMULATION: Supplied in PBS with 0.09% (W/V) sodium azide.

SPECIES REACTIVITY: Human.

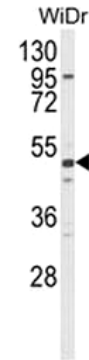
STORAGE CONDITIONS: Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

DESCRIPTION: Aldehyde dehydrogenases (ALDHs) mediate the NADP+-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.

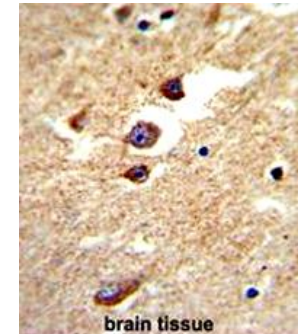
APPLICATION: Western blot: ~1:1000, IHC: ~1:50-1:100, FACS: ~1:10-1:50.

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

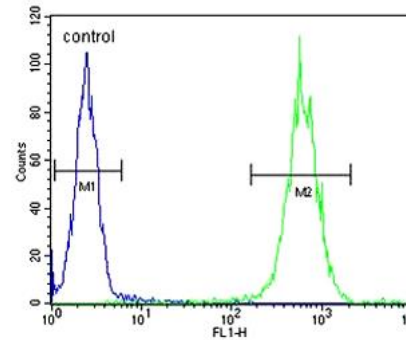
FOR RESEARCH USE ONLY! Not to be used on humans.



Western blot analysis in WiDr cell lysates (35 µg/lane).



Formalin-fixed and paraffin-embedded human brain tissue reacted with ALDH5A1 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.



FACS analysis with WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

RELATED PRODUCTS:

- Human Recombinant ALDH2 (Cat. No. 6332-100)
- Human Recombinant ALDH3A1 (Cat. No. 6333-100)
- ALDH2 Antibody (Clone # 138CT22.3.8) (Cat. No. 6746-100)
- ALDH2 Antibody (Cat. No. 6747-100)
- ALDH2 Antibody (Center) (Cat. No. 6748-100)
- ALDH2 Antibody (NT) (Cat. No. 6749-100)
- ALDH5A1 Antibody (CT) (Cat. No. 6751-100)
- ALDH5A1 Antibody (NT) (Cat. No. 6752-100)
- Aldehyde Dehydrogenase Activity Colorimetric Assay Kit (Cat. No. K731-100)
- PicoProbe™ Aldehyde Dehydrogenase Activity Fluorometric Assay Kit (Cat. No. K741-100)

