


Product datasheet

Anti-ALDH5A1/SSADH antibody ab155493

5 Images

Overview

Product name	Anti-ALDH5A1/SSADH antibody
Description	Rabbit polyclonal to ALDH5A1/SSADH
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Cow 
Immunogen	Recombinant fragment corresponding to Human ALDH5A1/SSADH aa 85-324. Database link: P51649
Positive control	293T, A431, H1299, HeLa, HepG2, MOLT4, Raji, Mouse brain whole cell lysate; A431 cells; A549 xenograft
General notes	Keep as a concentrated solution. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab155493 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 57 kDa.
IHC-P		1/100 - 1/1000. Suggested antigen retrieval using heat mediated 10mM Citrate buffer (pH6.0) or Tris-EDTA buffer (pH8.0).
ICC/IF		1/100 - 1/1000.

Target

Function

Catalyzes one step in the degradation of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA).

Tissue specificity

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

Pathway

Amino-acid degradation; 4-aminobutanoate degradation.

Involvement in disease

Defects in ALDH5A1 are the cause of succinate semialdehyde dehydrogenase deficiency (SSADH deficiency) [MIM:271980]. SSADH deficiency is a rare inborn error in the metabolism of 4-aminobutyric acid (GABA) which leads to accumulation of 4-hydroxybutyric acid in physiologic fluids of patients. The disease is characterized by severe ataxia and by mildly retarded psychomotor development.

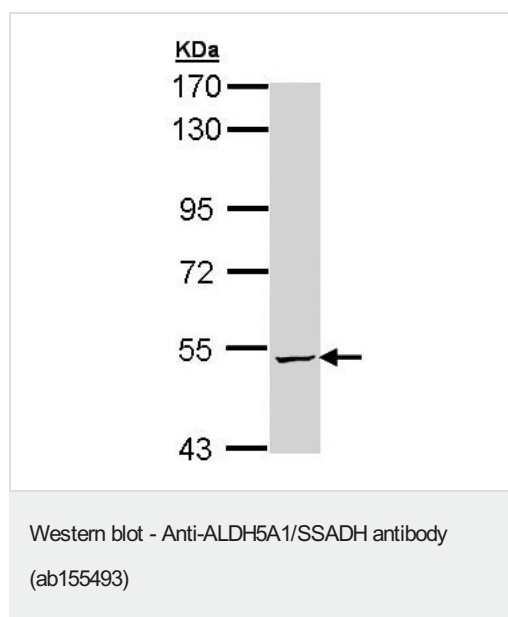
Sequence similarities

Belongs to the aldehyde dehydrogenase family.

Cellular localization

Mitochondrion.

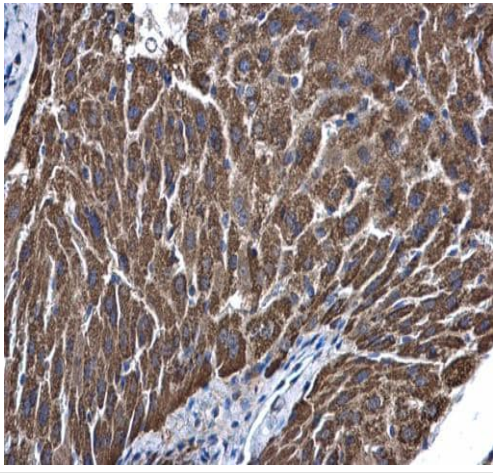
Images



Anti-ALDH5A1/SSADH antibody (ab155493) at 1/1000 dilution + A431 whole cell lysate at 30 µg

Predicted band size: 57 kDa

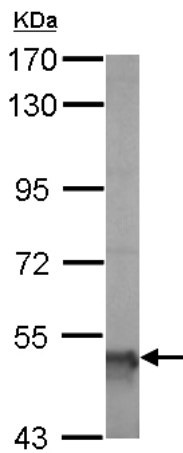
7.5% SDS PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ALDH5A1/SSADH antibody (ab155493)

Paraffin-embedded mouse liver tissue labeling ALDH5A1/SSADH using ab155493 at 1/500 dilution in immunohistochemical analysis.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 minutes.

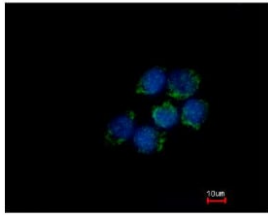
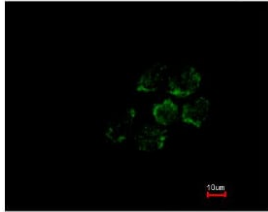


Western blot - Anti-ALDH5A1/SSADH antibody (ab155493)

Anti-ALDH5A1/SSADH antibody (ab155493) at 1/5000 dilution + Mouse brain whole cell lysate at 20 µg

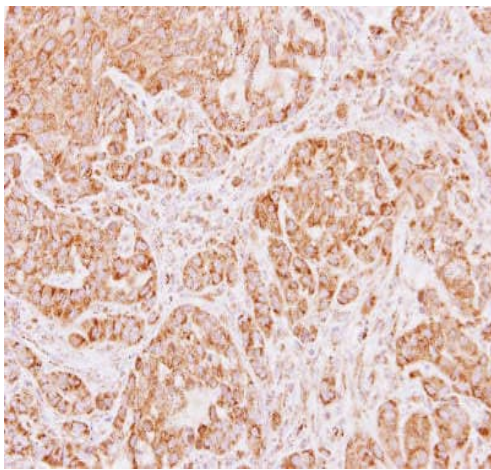
Predicted band size: 57 kDa

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Immunofluorescent analysis of methanol-fixed A431 cells labeling ALDH5A1/SSADH with ab155493 at 1/500 dilution. Lower panel co-stained with Hoescht 33342.

Immunocytochemistry/ Immunofluorescence - Anti-ALDH5A1/SSADH antibody (ab155493)



Immunohistochemical analysis of paraffin-embedded A549 xenograft labeling ALDH5A1/SSADH with ab155493 at 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ALDH5A1/SSADH antibody (ab155493)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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