# abcam

### Product datasheet

# Recombinant Human ALDH5A1/SSADH protein ab99429

## 1 Image

#### **Description**

Product name Recombinant Human ALDH5A1/SSADH protein

Purity > 90 % SDS-PAGE.

ab99429 is purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession P51649

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMAGRLAGLSAALLRTDSF

**VGGRWLPAAATF** 

PVQDPASGAALGMVADCGVREARAAVRAAYEAFCRWR

**EVSAKERSSLLRK** 

WYNLMIQNKDDLARIITAESGKPLKEAHGEILYSAFFLEWF

SEEARRVYG

DIIHTPAKDRRALVLKQPIGVAAVITPWNFPSAMITRKVGAA

LAAGCTVV

VKPAEDTPFSALALAELASQAGIPSGVYNVIPCSRKNAKE

**VGEAICTDPL** 

VSKISFTGSTTTGKILLHHAANSVKRVSMELGGLAPFIVFD

SANVDQAVA

GAMASKFRNTGQTCVCSNQFLVQRGIHDAFVKAFAEAMK

KNLRVGNGFEE

GTTQGPLINEKAVEKVEKQVNDAVSKGATVVTGGKRHQL

**GKNFFEPTLLC** 

NVTQDMLCTHEETFGPLAPVIKFDTEEEAIAIANAADVGLA

**GYFYSQDPA** 

QIWRVAEQLEVGMVGVNEGLISSVECPFGGVKQSGLGRE

GSKYGIDEYLE LKYVCYGGL

Predicted molecular weight 55 kDa including tags

Amino acids 48 to 535

Tags His tag N-Terminus

1

#### **Specifications**

Our Abpromise guarantee covers the use of ab99429 in the following tested applications.

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

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

Form Liquid

Additional notes This product was previously labelled as ALDH5A1

#### **Preparation and Storage**

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCI, 0.0292% EDTA, 10% Glycerol, 0.58% Sodium

chloride

#### **General Info**

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

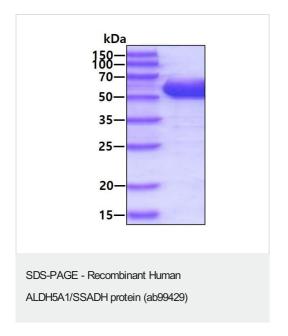
fluids of patients. The disease is characterized by severe ataxia and by mildly retarded

psychomotor development.

**Sequence similarities**Belongs to the aldehyde dehydrogenase family.

**Cellular localization** Mitochondrion.

#### **Images**



SDS-PAGE analysis of ab99429 (3  $\mu$ g) under reducing conditions and visualized by coomassie blue stain.

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

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