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Datasheet for 600-401-Y65

ASAH1 Antibody

Overview

Description:	Anti-ASAH1 (RABBIT) Antibody - 600-401-Y65
Item No.:	600-401-Y65
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Sphingolipids are hydrolyzed by ceramidases to yield sphingosine and fatty acids. These ceramidases are classified according to the pH range that supports their optimal activity. ASAH1 is an acid ceramidase and key regulator of ceramide metabolism. Mutations in this gene results in Farber Lipogranulomatosis, a fatal human genetic disorder that results in the painful swelling of the joints and tendons and pulmonary insufficiency, while a complete knockout of its expression is lethal in mice. Recent studies have shown elevated levels of ASAH1 in Alzheimer's disease (AD) patients correlating with a reduction in sphingomyelin and elevation of ceramide. Pretreatment of cultured neurons with recombinant AHAH1 prevented the cells from undergoing A-beta (Ab)-induced apoptosis. Multiple isoforms of this protein are known to exist.
Synonyms:	ASAH1 Antibody, AC, PHP, ASAH, PHP32, ACDase, SMAPME, HSD-33, HSD33, Acid ceramidase, Acylsphingosine deacylase, AC
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ASAH1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ASAH1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide near the C-terminus of the human ASAH1.
Purity/Specificity:	Anti-ASAH1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ASAH1 from other sources has not been determined. Multiple isoforms of ASAH1 are known to exist.
Relevant Links:	• UniProtKB - Q13510 • GeneID - 427 • NCBI - EAW63795

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ASAH1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 45 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1 - 2 µg/mL

Formulation

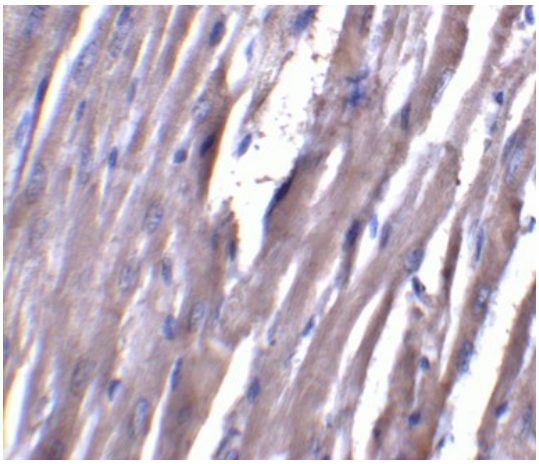
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

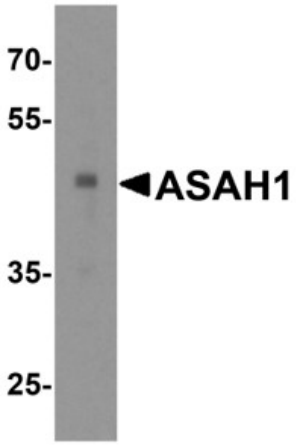
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

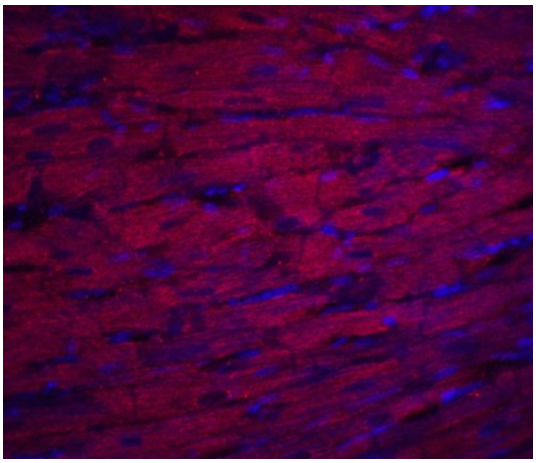
Images



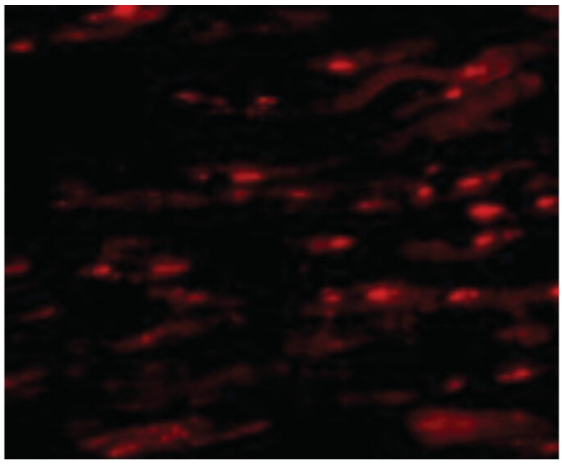
Immunohistochemistry
Immunohistochemistry of ASAH1 in rat heart tissue with ASAH1 antibody at 5 µg/mL.



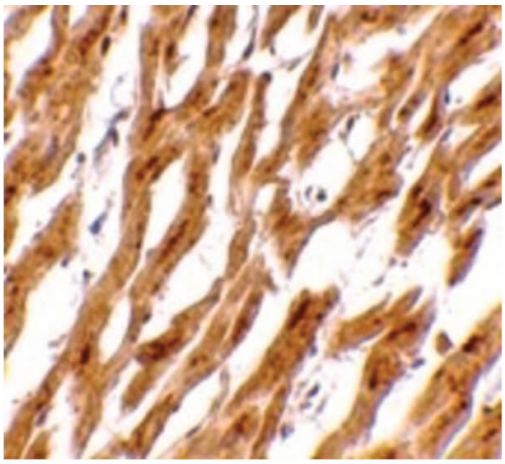
Western Blot
Western blot analysis of ASAH1 in human heart tissue lysate with ASAH1 antibody at 1 µg/mL.



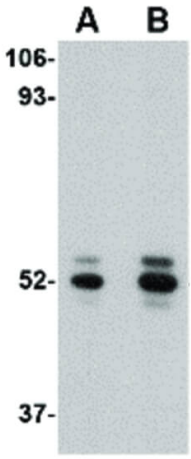
Immunofluorescence Microscopy
Immunofluorescence of ASAH1 in rat heart tissue with ASAH1 antibody at 20 µg/mL. Red: ASAH1 Antibody. Blue: DAPI staining.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of ASAH1 antibody. Tissue: Human heart cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ASAH1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: ASAH1 as a red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of ASAH1 antibody. Tissue: Human heart tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ASAH1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ASAH1 is nuclear and occasionally cytoplasmic. Staining: ASAH1 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of ASAH1 antibody. Lane A: Mouse heart tissue lysate at 1 µg/mL. Lane B: Mouse heart tissue lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 44.6 kDa, ~52 kDa for ASAH1.

Disclaimer

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