

## Datasheet for 600-401-Y65

**ASAH1 Antibody****Overview**

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

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	ASAH1 Antibody, AC, PHP, ASAH, PHP32, ACDase, SMAPME, HSD-33, HSD33, Acid ceramidase, Acylsphingosine deacylase, AC
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	ASAH1
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	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.
<b>Purity/Specificity:</b>	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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q13510</a></li><li>• <a href="#">GeneID - 427</a></li><li>• <a href="#">NCBI - EAW63795</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IF, IHC, WB
<b>Application Note:</b>	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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:10,000-1:20,000
<b>IF:</b>	20 µg/mL
<b>IHC:</b>	2.5 µg/mL
<b>WB:</b>	1 - 2 µg/mL

## Formulation

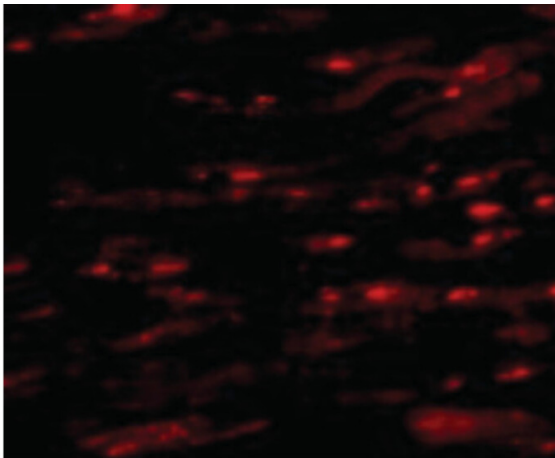
<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.02% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

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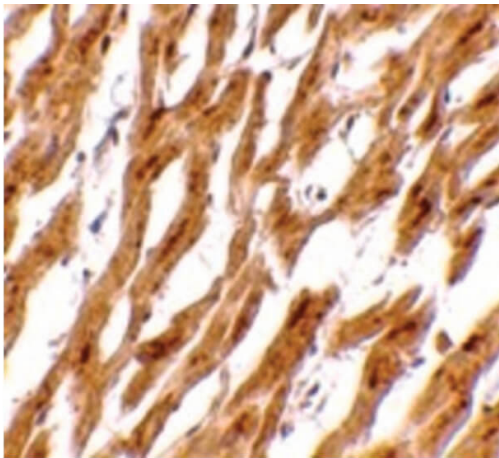
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as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

## Images



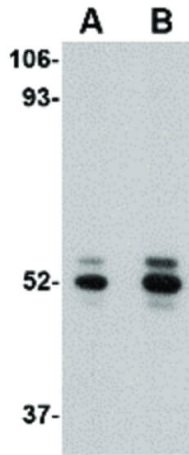
### Immunofluorescence Microscopy

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  $\mu\text{g}/\text{mL}$ . Lane B: Mouse heart tissue lysate at 2  $\mu\text{g}/\text{mL}$ . Load: 35  $\mu\text{g}$  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**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.