

**ASAH2 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP17664b****Specification**

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**ASAH2 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9NR71</a>
Other Accession	<a href="#">P0C7U2</a> , <a href="#">P0C7U1</a> , <a href="#">NP_001072984.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	85516
Antigen Region	734-762

**ASAH2 Antibody (C-term) - Additional Information****Gene ID** 56624**Other Names**

Neutral ceramidase, N-CDase, NCDase, Acylsphingosine deacylase 2, BCDase, LCDase, hCD, N-acylsphingosine amidohydrolase 2, Non-lysosomal ceramidase, Neutral ceramidase soluble form, ASAH2, HNAC1

**Target/Specificity**

This ASAH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 734-762 amino acids from the C-terminal region of human ASAH2.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ASAH2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ASAH2 Antibody (C-term) - Protein Information****Name** ASAH2

## Synonyms HNAC1

**Function** Plasma membrane ceramidase that hydrolyzes sphingolipid ceramides into sphingosine and free fatty acids at neutral pH (PubMed:[10781606](#), PubMed:[16229686](#), PubMed:[26190575](#)). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:[15946935](#), PubMed:[19345744](#), PubMed:[24798654](#)). Also catalyzes the reverse reaction allowing the synthesis of ceramides from fatty acids and sphingosine (PubMed:[11278489](#), PubMed:[17475390](#)). Together with sphingomyelinase, participates in the production of sphingosine and sphingosine-1-phosphate from the degradation of sphingomyelin, a sphingolipid enriched in the plasma membrane of cells (PubMed:[16061940](#)). Also participates in the hydrolysis of ceramides from the extracellular milieu allowing the production of sphingosine-1-phosphate inside and outside cells (By similarity). This is the case for instance with the digestion of dietary sphingolipids in the intestinal tract (By similarity).

## Cellular Location

[Neutral ceramidase]: Cell membrane; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q91XT9}. Membrane raft {ECO:0000250|UniProtKB:Q9JHE3}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q91XT9}. Membrane, caveola {ECO:0000250|UniProtKB:Q9JHE3}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q91XT9}. Golgi apparatus membrane; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q91XT9}. Mitochondrion. Secreted, extracellular exosome. Note=Enriched in exosomes upon stimulation by cytokine (PubMed:24798654). Enriched in caveolae and lipid rafts (By similarity). The localization to the mitochondrion could not be confirmed (PubMed:15845354) {ECO:0000250|UniProtKB:Q9JHE3, ECO:0000269|PubMed:15845354, ECO:0000269|PubMed:24798654}

## Tissue Location

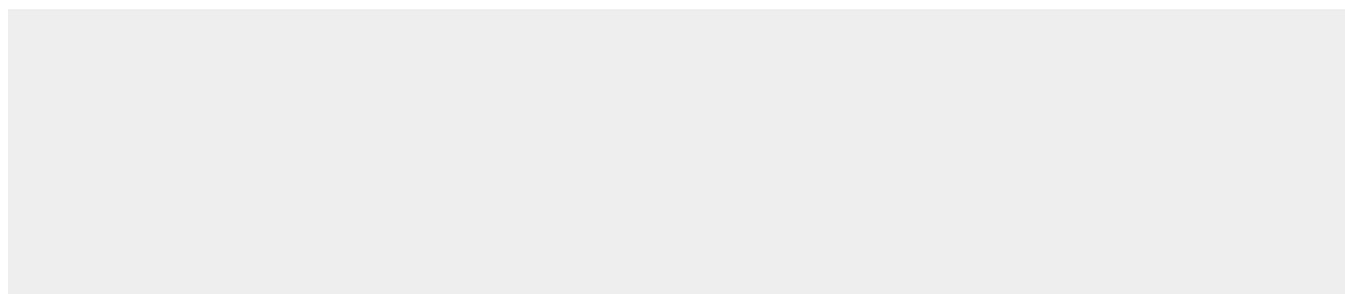
Primarily expressed in intestine (PubMed:17334805). Ubiquitously expressed with higher levels in kidney, skeletal muscle and heart (PubMed:10781606). The ubiquitous expression observed for ASAH2 might be an experimental artifact due to the paralog ASAH2B (PubMed:17334805).

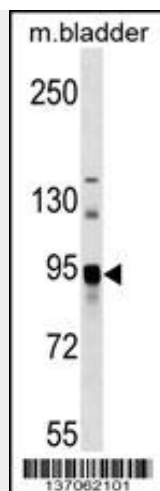
## ASAH2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## ASAH2 Antibody (C-term) - Images





ASA2 Antibody (C-term) (Cat. #AP17664b) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the ASA2 antibody detected the ASA2 protein (arrow).

#### **ASA2 Antibody (C-term) - Background**

Ceramidases (EC 3.5.1.23), such as ASA2, catalyze hydrolysis of the N-acyl linkage of ceramide, a second messenger in a variety of cellular events, to produce sphingosine. Sphingosine exerts both mitogenic and apoptosis-inducing activities, and its phosphorylated form functions as an intra- and intercellular second messenger (see MIM 603730) (Mitsutake et al., 2001 [PubMed 11328816]).

#### **ASA2 Antibody (C-term) - References**

Uchida, Y., et al. J. Invest. Dermatol. 130(10):2472-2480(2010)  
Hong, K.K., et al. J. Korean Med. Sci. 22(5):862-867(2007)  
Ohlsson, L., et al. Biochimie 89(8):950-960(2007)  
Avramopoulos, D., et al. Neurogenetics 8(2):111-120(2007)  
Galadari, S., et al. Biochem. J. 393 (PT 3), 687-695 (2006) :