

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

Specification

ASAH2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q9NR71
Other Accession	P0C7U2 , P0C7U1 , NP_001072984.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
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

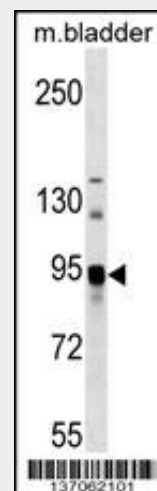
WB~1:1000

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.



ASAH2 Antibody (C-term) (Cat. #AP17664b) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the ASAH2 antibody detected the ASAH2 protein (arrow).

ASAH2 Antibody (C-term) - Background

Ceramidases (EC 3.5.1.23), such as ASAH2, 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]).

ASAH2 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

Precautions

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

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) :

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:<a href="http://www.uniprot.org/citations/10781606"

target="_blank">10781606 ,

PubMed:<a href="http://www.uniprot.org/citations/16229686"

target="_blank">16229686 ,

PubMed:<a href="http://www.uniprot.org/citations/26190575"

target="_blank">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:<a href="http://www.uniprot.org/citations/15946

935" target="_blank">15946935 ,

PubMed:<a href="http://www.uniprot.org/citations/19345744"

target="_blank">19345744 ,

PubMed:<a href="http://www.uniprot.org/citations/24798654"

target="_blank">24798654). Also

catalyzes the reverse reaction allowing the

synthesis of ceramides from fatty acids and

sphingosine (PubMed:<a href="http://www.uniprot.org/citations/11278489"

target="_blank">11278489 ,

PubMed:<a href="http://www.uniprot.org/citations/17475390"

target="_blank">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:<a href="http://

www.uniprot.org/citations/16061940"

target="_blank">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](#)