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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 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 Cytomety
- Cell Culture

ASAH2 Antibody (C-term) - Images

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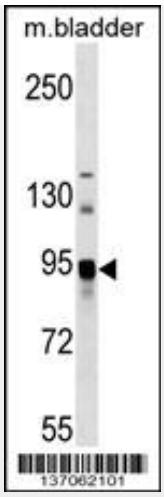

ASAH2 Antibody (C-term) (Cat. #AP17664b) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the ASAH2 antibody detected the ASAH2 protein (arrow).

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

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Galadari, S., et al. Biochem. J. 393 (PT 3), 687-695 (2006) :