

ASAH2 Blocking Peptide
Catalog # PBV10377b**Specification**

ASAH2 Blocking Peptide - Product Information

Primary Accession	Q9NR71
Gene ID	56624
Calculated MW	85516

ASAH2 Blocking Peptide - Additional Information**Gene ID** 56624**Application & Usage**

The peptide is used for blocking the antibody activity of ASAH2. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

Neutral ceramidase, N-CDase, NCDase, 3.5.1.23, Acylsphingosine deacylase 2, BCDase, LCDase, hCD, N-acylsphingosine amidohydrolase 2, Non-lysosomal ceramidase, Neutral ceramidase soluble form, ASAH2, HNAC1

Target/Specificity

ASAH2

Formulation

50 µg (0.5 mg/ml) ASAH2 peptide in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

ASAH2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

ASAH2 Blocking Peptide - 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 Blocking Peptide - 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 Blocking Peptide - Images