

ASAH3L Polyclonal Antibody

Catalog # AP73856

Specification

ASAH3L Polyclonal Antibody - Product Information

Application WB
Primary Accession O50JU3

Reactivity Human, Mouse

Host Rabbit Clonality Polyclonal

ASAH3L Polyclonal Antibody - Additional Information

Gene ID 340485

Other Names

ACER2; ASAH3L; PP11646; Alkaline ceramidase 2; AlkCDase 2; Alkaline CDase 2; haCER2; Acylsphingosine deacylase 3-like; N-acylsphingosine amidohydrolase 3-like

Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Storage Conditions -20°C

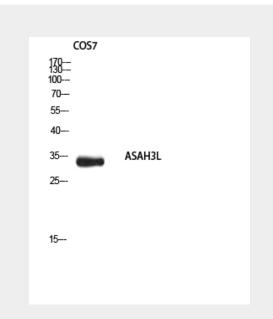
ASAH3L Polyclonal Antibody - Protein Information

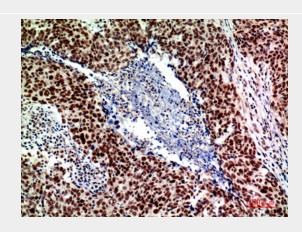
Name ACER2 (HGNC:23675)

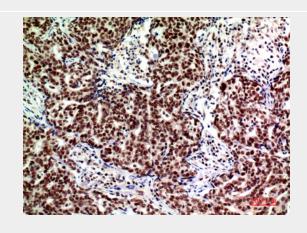
Synonyms ASAH3L

Function

Golgi ceramidase that catalyzes the hydrolysis of ceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:16940153" target="_blank">16940153, PubMed:<a href="http://www.uniprot.org/ci





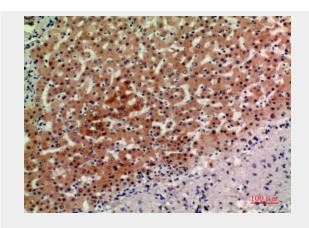


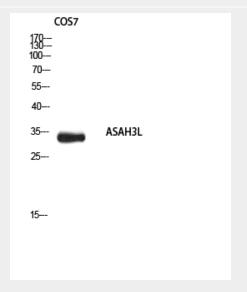


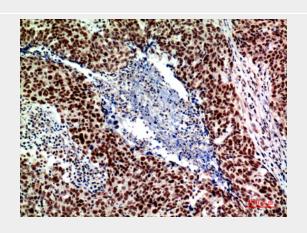
tations/18945876" target=" blank">18945876, PubMed:20207939, PubMed:20089856). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation. apoptosis and differentiation (PubMed:<a hr ef="http://www.uniprot.org/citations/20207 939" target=" blank">20207939). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (PubMed:16940153, PubMed: 18945876, PubMed:20207939,

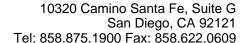
PubMed:20089856). Saturated long-chain ceramides and unsaturated very long-chain ceramides are also good substrates, whereas saturated very long-chain ceramides and short-chain ceramides are poor substrates (PubMed:20089856). Also hydrolyzes dihydroceramides to produce dihydrosphingosine (PubMed:<a hr ef="http://www.uniprot.org/citations/20207 939" target=" blank">20207939, PubMed:<a href="http://www.uniprot.org/ci tations/20628055"

target="_blank">20628055). It is the ceramidase that controls the levels of circulating sphingosine-1- phosphate and dihydrosphingosine-1-phosphate in plasma through their production by hematopoietic cells (By similarity). Regulates cell proliferation, autophagy and apoptosis by the production of sphingosine and sphingosine-1-phosphate (PubMed:16940153, PubMed:<a href="http://www.uniprot.org/ci











tations/26943039"

target=" blank">26943039,

PubMed: <a href="http://www.uniprot.org/ci tations/28294157"

target=" blank">28294157,

PubMed: <a href="http://www.uniprot.org/ci tations/29229990"

target="_blank">29229990). As part of a p53/TP53-dependent pathway, promotes for instance autophagy and apoptosis in response to DNA damage (PubMed:<a href="http://www.uniprot.org/c itations/26943039"

target=" blank">26943039,

PubMed: <a href="http://www.uniprot.org/ci tations/28294157"

target="_blank">28294157,

PubMed: <a href="http://www.uniprot.org/ci tations/29229990"

target="_blank">29229990). Through the production of sphingosine, may also regulate the function of the Golgi complex and regulate the glycosylation of proteins (PubMed:<a href="http://www.uniprot.org/c itations/18945876"

target=" blank">18945876).

Cellular Location

Golgi apparatus membrane; Multi-pass membrane protein

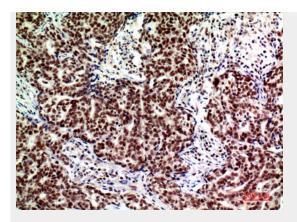
Tissue Location

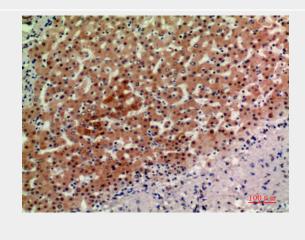
Highly expressed in placenta.

ASAH3L Polyclonal Antibody - Protocols

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

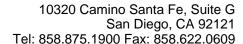
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





ASAH3L Polyclonal Antibody - Background

Golgi ceramidase that catalyzes the hydrolysis of ceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:16940153, PubMed:18945876, PubMed:20207939, PubMed:20089856). 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:20207939). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (PubMed:16940153, PubMed:18945876, PubMed:20207939, PubMed:20089856). Saturated long-chain ceramides and unsaturated very long-chain ceramides are also good substrates, whereas saturated very long-chain ceramides and short-chain ceramides are poor substrates (PubMed:20089856). Also hydrolyzes dihydroceramides to produce





dihydrosphingosine (PubMed:20207939, PubMed:20628055). It is the ceramidase that controls the levels of circulating sphingosine-1-phosphate and dihydrosphingosine-1-phosphate in plasma through their production by hematopoietic cells (By similarity). Regulates cell proliferation, autophagy and apoptosis by the production of sphingosine and sphingosine-1-phosphate (PubMed:16940153, PubMed:26943039, PubMed:28294157, PubMed:29229990). As part of a p53/TP53-dependent pathway, promotes for instance autophagy and apoptosis in response to DNA damage (PubMed:26943039, PubMed:28294157, PubMed:29229990). Through the production of sphingosine, may also regulate the function of the Golgi complex and regulate the glycosylation of proteins (PubMed:18945876).