

ASAH3L Polyclonal Antibody

Catalog # AP73856

## Specification

# ASAH3L Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P <u>O5OJU3</u> Human, Mouse Rabbit 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. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) 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:<a href="http://www.uniprot.org/citations/16940153" target="\_blank">16940153</a>, PubMed:<a href="http://www.uniprot.org/citations/18945876" target="\_blank">18945876</a>, PubMed:<a href="http://www.uniprot.org/citations/20089856" target="\_blank">20089856</a>, PubMed:<a href="http://www.uniprot.org/citations/2007939" target="\_blank">20089856</a>, PubMed:<a href="http://www.uniprot.org/citations/20207939" target="\_blank">20207939</a>). 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/20207939" target="\_blank">20207939</a>). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (PubMed:<a href="http://www.uniprot.org/citations/16940153"



target=" blank">16940153</a>, PubMed:<a href="http://www.uniprot.org/citations/18945876" target="blank">18945876</a>, PubMed:<a href="http://www.uniprot.org/citations/20089856" target=" blank">20089856</a>, PubMed:<a href="http://www.uniprot.org/citations/20207939" target=" blank">20207939</a>). 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: <a href="http://www.uniprot.org/citations/20089856" target=" blank">20089856</a>). Also hydrolyzes dihydroceramides to produce dihydrosphingosine (PubMed: <a href="http://www.uniprot.org/citations/20207939" target=" blank">20207939</a>, PubMed:<a href="http://www.uniprot.org/citations/20628055" target="\_blank">20628055</a>). 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:<a href="http://www.uniprot.org/citations/16940153" target=" blank">16940153</a>, PubMed:<a href="http://www.uniprot.org/citations/26943039" target=" blank">26943039</a>, PubMed:<a href="http://www.uniprot.org/citations/28294157" target=" blank">28294157</a>, PubMed:<a href="http://www.uniprot.org/citations/29229990" target=" blank">29229990</a>). 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/citations/26943039" target=" blank">26943039</a>, PubMed:<a href="http://www.uniprot.org/citations/28294157" target=" blank">28294157</a>, PubMed:<a href="http://www.uniprot.org/citations/29229990" target=" blank">29229990</a>). 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/citations/18945876" target="\_blank">18945876</a>).

**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.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- ASAH3L Polyclonal Antibody Images



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# 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).