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ASAH3 Polyclonal Antibody
Catalog # AP73855

Specification

ASAH3 Polyclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q8TDN7
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**

ASAH3 Polyclonal Antibody - Additional Information

Gene ID 125981

Other Names
ACER1; ASAH3; Alkaline ceramidase 1; AlkCDase 1; Alkaline CDase 1; Acylsphingosine deacylase 3; N-acylsphingosine amidohydrolase 3

Dilution
WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

ASAH3 Polyclonal Antibody - Protein Information

Name ACER1 (HGNC:18356)

Synonyms ASAH3

Function
Endoplasmic reticulum ceramidase that catalyzes the hydrolysis of ceramides into sphingosine and free fatty acids at alkaline pH (PubMed:17713573, PubMed:20207939, PubMed:20628055). 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:12783875). Exhibits a strong substrate specificity towards the natural stereoisomer of ceramides with D-erythro-sphingosine as a backbone and has a higher activity towards very long-chain unsaturated fatty acids like the C24:1-ceramide (PubMed:17713573, PubMed:20207939). May also

hydrolyze dihydroceramides to produce dihydrosphingosine (PubMed:20207939, PubMed:20628055). ACER1 is a skin-specific ceramidase that regulates the levels of ceramides, sphingosine and sphingosine-1-phosphate in the epidermis, mediates the calcium-induced differentiation of epidermal keratinocytes and more generally plays an important role in skin homeostasis (PubMed:17713573).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

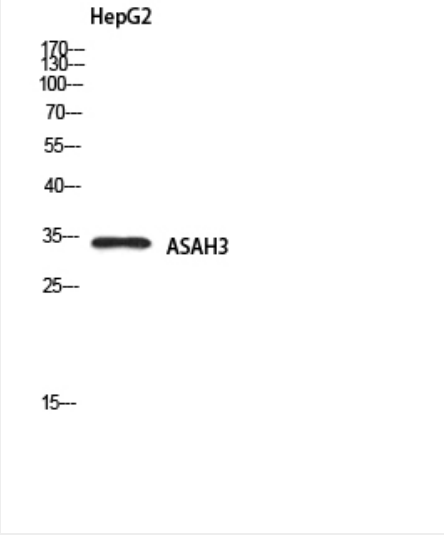
Tissue Location
Mainly expressed in epidermis.

ASAH3 Polyclonal Antibody - 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

ASAH3 Polyclonal Antibody - Images



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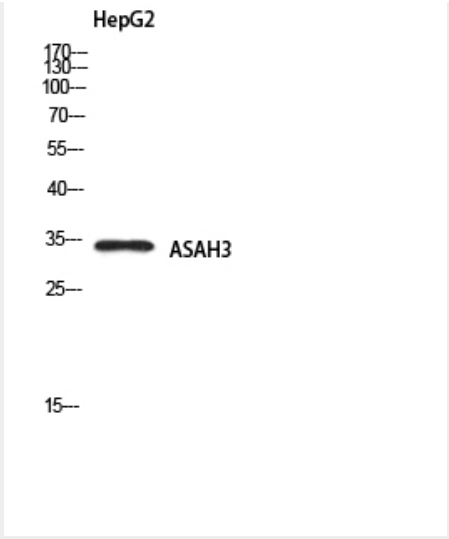

ASAH3 Polyclonal Antibody - Background

Endoplasmic reticulum ceramidase that catalyzes the hydrolysis of ceramides into sphingosine and free fatty acids at alkaline pH (PubMed:17713573, PubMed:20207939, PubMed:20628055). 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:12783875). Exhibits a strong substrate specificity towards the natural stereoisomer of ceramides with D-erythro-sphingosine as a backbone and has a higher activity towards very long-chain unsaturated fatty acids like the C24:1-ceramide (PubMed:17713573, PubMed:20207939). May also hydrolyze dihydroceramides to produce dihydrosphingosine (PubMed:20207939, PubMed:20628055). ACER1 is a skin-specific ceramidase that regulates the levels of ceramides, sphingosine and sphingosine-1-phosphate in the epidermis, mediates the calcium-induced differentiation of epidermal keratinocytes and more generally plays an important role in skin homeostasis (PubMed:17713573).