

ASAH3 Polyclonal Antibody

Catalog # AP73855

Product Information

Application	WB, E
Primary Accession	Q8TDN7
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31095

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. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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

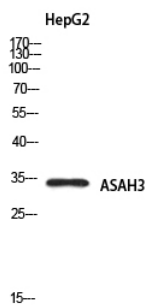
Tissue Location

Mainly expressed in epidermis.

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](#)).

Images



Western blot analysis of HepG2 using ASAH3 antibody..
Secondary antibody was diluted at 1:20000

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