

Anti-ACER1 Antibody
Rabbit polyclonal antibody to ACER1
Catalog # AP59956

Specification

Anti-ACER1 Antibody - Product Information

Application	WB
Primary Accession	Q8TDN7
Other Accession	Q8R4X1
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31095

Anti-ACER1 Antibody - Additional Information

Gene ID 125981

Other Names

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

Target/Specificity

Recognizes endogenous levels of ACER1 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-ACER1 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](http://www.uniprot.org/citations/17713573), PubMed: [20207939](http://www.uniprot.org/citations/20207939), PubMed: [20628055](http://www.uniprot.org/citations/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

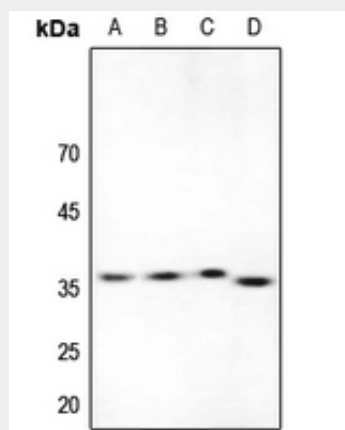
Mainly expressed in epidermis.

Anti-ACER1 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 Cytometry](#)
- [Cell Culture](#)

Anti-ACER1 Antibody - Images



Western blot analysis of ACER1 expression in HEK293T (A), mouse kidney (B), mouse liver (C), rat kidney (D) whole cell lysates.

Anti-ACER1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ACER1. The exact sequence is proprietary.