

# Anti-ACER1 Antibody

Rabbit polyclonal antibody to ACER1

Catalog # AP59956

## Product Information

Application	WB
Primary Accession	<a href="#">Q8TDN7</a>
Other Accession	<a href="#">Q8R4X1</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31095

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

## Protein Information

Name	ACER1 ( <a href="#">HGNC:18356</a> )
Synonyms	ASAH3
Function	Endoplasmic reticulum ceramidase that catalyzes the hydrolysis of ceramides into sphingosine and free fatty acids at alkaline pH (PubMed: <a href="#">17713573</a> , PubMed: <a href="#">20207939</a> , PubMed: <a href="#">20628055</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="#">12783875</a> ). 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: <a href="#">17713573</a> , PubMed: <a href="#">20207939</a> ). 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.

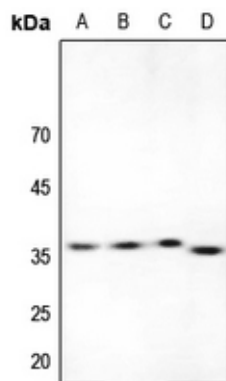
## Background

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

## Images

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.