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ACER1 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI14573

Specification

ACER1 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	Q8TDN7
Other Accession	NM_133492, NP_597999
Reactivity	**Human**
Predicted	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**31kDa KDa**

ACER1 antibody - C-terminal region - Additional Information

Gene ID 125981

Alias Symbol	**ASAH3, MGC138327, MGC138329, ALKCDase1**

Other Names
Alkaline ceramidase 1, AlkCDase 1, Alkaline CDase 1, 3.5.1.23, Acylsphingosine deacylase 3, N-acylsphingosine amidohydrolase 3, ACER1, ASAH3

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-ACER1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
ACER1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

ACER1 antibody - C-terminal region - 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

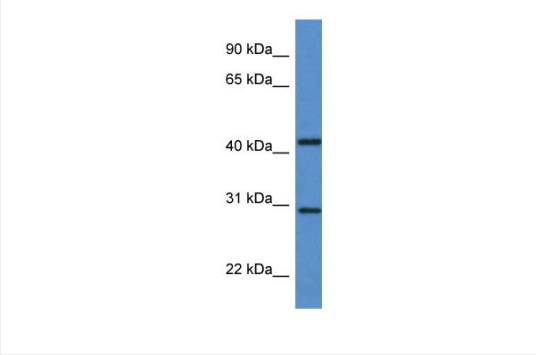
Tissue Location
Mainly expressed in epidermis.

ACER1 antibody - C-terminal region - 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

ACER1 antibody - C-terminal region - Images



WB Suggested Anti-ACER1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Brain

ACER1 antibody - C-terminal region - References

Mao C.,et al.J. Biol. Chem. 278:31184-31191(2003).

Houben E.,et al.J. Lipid Res. 47:1063-1070(2006).