

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

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**ACER1 antibody - C-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">Q8TDN7</a>
Other Accession	<a href="#">NM_133492</a> , <a href="#">NP_597999</a>
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](http://www.uniprot.org/citations/17713573) target="\_blank">17713573</a>, PubMed: [20207939](http://www.uniprot.org/citations/20207939) target="\_blank">20207939</a>, PubMed: [20628055](http://www.uniprot.org/citations/20628055) target="\_blank">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="http://www.uniprot.org/citations/12783875" target="\_blank">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="http://www.uniprot.org/citations/17713573" target="\_blank">17713573</a>, PubMed:<a href="http://www.uniprot.org/citations/20207939" target="\_blank">20207939</a>). May also hydrolyze dihydroceramides to produce dihydrosphingosine (PubMed:<a href="http://www.uniprot.org/citations/20207939" target="\_blank">20207939</a>, PubMed:<a href="http://www.uniprot.org/citations/20628055" target="\_blank">20628055</a>). 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:<a href="http://www.uniprot.org/citations/17713573" target="\_blank">17713573</a>).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

#### Tissue Location

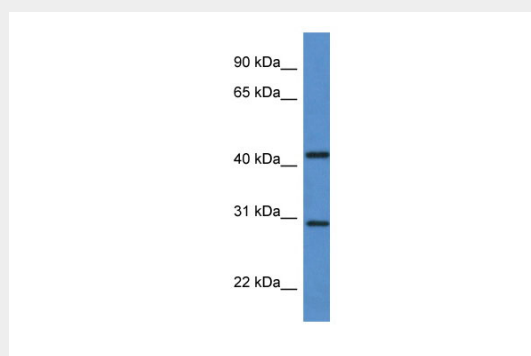
Mainly expressed in epidermis.

### 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 Cytometry](#)
- [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).