10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACER1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14573

Product Information

Application	WB
Primary Accession	Q8TDN7
Other Accession	NM_133492, NP_597999
Reactivity	Human
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31095

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.

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).

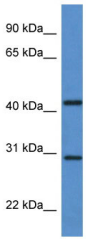
Cellular Location Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location Mainly expressed in epidermis.

References

Mao C.,et al.J. Biol. Chem. 278:31184-31191(2003).
Houben E.,et al.J. Lipid Res. 47:1063-1070(2006).

Images



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

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