

ACER3 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8953b**Specification**

ACER3 Antibody (C-term) - Product Information

Application	WB, FC, E
Primary Accession	O9NUN7
Other Accession	O9D099
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	31552
Antigen Region	224-250

ACER3 Antibody (C-term) - Additional Information**Gene ID** 55331**Other Names**

Alkaline ceramidase 3, AlkCDase 3, Alkaline CDase 3, 351-, Alkaline dihydroceramidase SB89, Alkaline phytoceramidase, aPHC, ACER3, APHC, PHCA

Target/Specificity

This ACER3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 224-250 amino acids from the C-terminal region of human ACER3.

DilutionWB~~1:1000
FC~~1:10~50**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ACER3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ACER3 Antibody (C-term) - Protein Information**Name** ACER3

Synonyms APHC, PHCA

Function Endoplasmic reticulum and Golgi ceramidase that catalyzes the hydrolysis of unsaturated long-chain C18:1-, C20:1- and C20:4- ceramides, dihydroceramides and phytoceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:[20068046](#), PubMed:[26792856](#), PubMed:[20207939](#), PubMed:[11356846](#), PubMed:[30575723](#)). 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:[20068046](#)). Controls the generation of sphingosine in erythrocytes, and thereby sphingosine-1-phosphate in plasma (PubMed:[20207939](#)). Through the regulation of ceramides and sphingosine-1-phosphate homeostasis in the brain may play a role in neurons survival and function (By similarity). By regulating the levels of pro-inflammatory ceramides in immune cells and tissues, may modulate the inflammatory response (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein

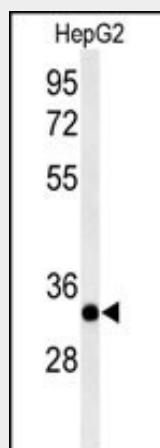
Tissue Location

Ubiquitously expressed. Highly expressed in placenta (PubMed:11356846). Expressed in erythrocytes (PubMed:20207939).

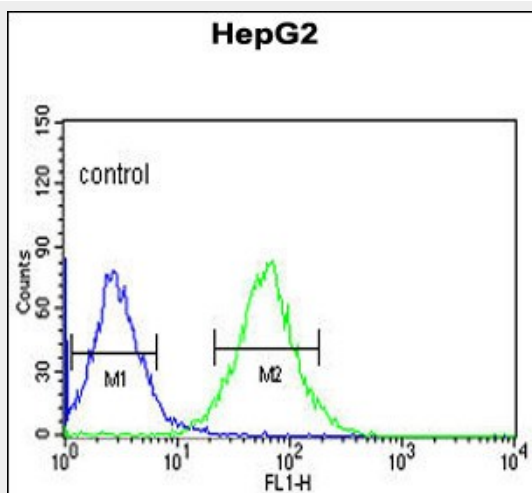
ACER3 Antibody (C-term) - Protocols

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](#)

ACER3 Antibody (C-term) - Images

Western blot analysis of ACER3 Antibody (C-term) (Cat. #AP8953b) in HepG2 cell line lysates (35ug/lane). ACER3 (arrow) was detected using the purified Pab.



ACER3 Antibody (C-term) (Cat. #AP8953b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ACER3 Antibody (C-term) - Background

ACER3 hydrolyzes only phytoceramide into phytosphingosine and free fatty acid. Does not have reverse activity.

ACER3 Antibody (C-term) - References

Wheeler, H.E., et.al., PLoS Genet. 5 (10), E1000685 (2009)
Mao, C. et.al., Biochim. Biophys. Acta 1781 (9), 424-434 (2008)