

## **CIDEA Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14057b

## **Specification**

## **CIDEA Antibody (C-term) - Product Information**

WB,E Application **Primary Accession** 060543 NP 001270.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 24687 Antigen Region 181-209

## **CIDEA Antibody (C-term) - Additional Information**

#### **Gene ID 1149**

#### **Other Names**

Cell death activator CIDE-A, Cell death-inducing DFFA-like effector A, CIDEA

#### Target/Specificity

This CIDEA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 181-209 amino acids from the C-terminal region of human CIDEA.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

### **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**

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

## CIDEA Antibody (C-term) - Protein Information

Name CIDEA {ECO:0000303|PubMed:18509062, ECO:0000312|HGNC:HGNC:1976}

Function Lipid transferase that promotes unilocular lipid droplet formation by mediating lipid



droplet fusion (PubMed: 19843876, PubMed: 26118629). Lipid droplet fusion promotes their enlargement, restricting lipolysis and favoring lipid storage (PubMed:19843876). Localizes on the lipid droplet surface, at focal contact sites between lipid droplets, and mediates atypical lipid droplet fusion by promoting directional net neutral lipid transfer from the smaller to larger lipid droplets (By similarity). The transfer direction may be driven by the internal pressure difference between the contacting lipid droplet pair and occurs at a lower rate than that promoted by CIDEC (By similarity). May also act as a CEBPB coactivator in epithelial cells to control the expression of a subset of CEBPB downstream target genes, including ID2, IGF1, PRLR, SOCS1, SOCS3, XDH, but not casein (By similarity). By interacting with CEBPB, strengthens the association of CEBPB with the XDH promoter, increases histone acetylation and dissociates HDAC1 from the promoter (By similarity). When overexpressed, induces apoptosis; the physiological significance of its role in apoptosis is unclear (By similarity).

#### **Cellular Location**

Lipid droplet. Nucleus {ECO:0000250|UniProtKB:O70302}. Note=Enriched at lipid droplet contact sites.

#### **Tissue Location**

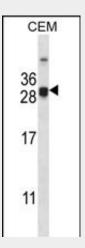
Expressed in omental and subcutaneous adipose tissue (at protein level).

#### CIDEA Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

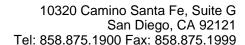
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# CIDEA Antibody (C-term) - Images



CIDEA Antibody (C-term) (Cat. #AP14057b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the CIDEA antibody detected the CIDEA protein (arrow).

## CIDEA Antibody (C-term) - Background





This gene encodes the homolog of the mouse protein Cidea that has been shown to activate apoptosis. This activation of apoptosis is inhibited by the DNA fragmentation factor DFF45 but not by caspase inhibitors. Mice that lack functional Cidea have higher metabolic rates, higher lipolysis in brown adipose tissue and higher core body temperatures when subjected to cold. These mice are also resistant to diet-induced obesity and diabetes. This suggests that in mice this gene product plays a role in thermogenesis and lipolysis. Alternatively spliced transcripts have been identified.

## **CIDEA Antibody (C-term) - References**

Li, F., et al. FEBS J. 277(20):4173-4183(2010) Ito, M., et al. J. Lipid Res. 51(7):1676-1684(2010) Huang, Y.W., et al. Gynecol. Oncol. 117(2):239-247(2010) Laurencikiene, J., et al. Cancer Res. 68(22):9247-9254(2008) Valouskova, E., et al. Gen. Physiol. Biophys. 27(2):92-100(2008)