

CIDEA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14057b

Specification

CIDEA Antibody (C-term) - Product Information

Application WB.E **Primary Accession** 060543 Other Accession NP 001270.1 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

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

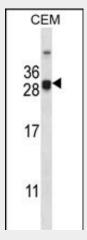
Expressed in omental and subcutaneous adipose tissue (at protein level).

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)