

CIDEA / CIDE-A Antibody (aa200-217) Rabbit Polyclonal Antibody Catalog # ALS11531

### Specification

# CIDEA / CIDE-A Antibody (aa200-217) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IF, WB, IHC <u>060543</u> Human Rabbit Polyclonal 25kDa KDa

### CIDEA / CIDE-A Antibody (aa200-217) - Additional Information

Gene ID 1149

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

Target/Specificity peptide corresponding to amino acids 200 to 217 of human CIDE-A

**Reconstitution & Storage** Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions** CIDEA / CIDE-A Antibody (aa200-217) is for research use only and not for use in diagnostic or therapeutic procedures.

### CIDEA / CIDE-A Antibody (aa200-217) - 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:<a href="http://www.uniprot.org/citations/19843876" target="\_blank">19843876</a>, PubMed:<a href="http://www.uniprot.org/citations/26118629" target="\_blank">26118629</a>). Lipid droplet fusion promotes their enlargement, restricting lipolysis and favoring lipid storage (PubMed:<a href="http://www.uniprot.org/citations/19843876" target="\_blank">19843876</a>). 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:070302}. Note=Enriched at lipid droplet contact sites.

Tissue Location

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

### CIDEA / CIDE-A Antibody (aa200-217) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CIDEA / CIDE-A Antibody (aa200-217) - Images



Immunofluorescence of CIDE-A in Human Brain cells with CIDE-A antibody at 20 ug/ml.





Western blot of CIDE-A in human brain tissue lysate in the absence (A) or presence (B) of...



Anti-CIDE A antibody IHC of human testis. CIDEA / CIDE-A Antibody (aa200-217) - Background

Acts as a CEBPB coactivator in mammary 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 interacting with CEBPB, strengthens the association of CEBPB with the XDH promoter, increases histone acetylation and dissociates HDAC1 from the promoter (By similarity). Binds to lipid droplets and regulates their enlargement, thereby restricting lipolysis and favoring storage. At focal contact sites between lipid droplets, promotes directional net neutral lipid transfer from the smaller to larger lipid droplets. 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. When overexpressed, induces apoptosis. The physiological significance of its role in apoptosis is unclear.

# CIDEA / CIDE-A Antibody (aa200-217) - References

Inohara N., et al.EMBO J. 17:2526-2533(1998). Liang L., et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases. Puri V., et al.Proc. Natl. Acad. Sci. U.S.A. 105:7833-7838(2008). Liu K., et al.Am. J. Physiol. 297:E1395-E1413(2009).