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

CIDEA Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP14057b

Specification

CIDEA Antibody (C-term) Blocking peptide - Product Information

Primary Accession O60543

CIDEA Antibody (C-term) Blocking peptide - Additional Information

Gene ID 1149

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP14057b was selected from the C-term region of CIDEA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CIDEA Antibody (C-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

CIDEA Antibody (C-term) Blocking peptide - Images

CIDEA Antibody (C-term) Blocking peptide - Background

This gene encodes the homolog of the mouse protein Cideathat has been shown to activate apoptosis. This activation ofapoptosis is inhibited by the DNA fragmentation factor DFF45 butnot by caspase inhibitors. Mice that lack functional Cidea havehigher metabolic rates, higher lipolysis in brown adipose tissueand higher core body temperatures when subjected to cold. Thesemice are also resistant to diet-induced obesity and diabetes. Thissuggests that in mice this gene product plays a role inthermogenesis and lipolysis. Alternatively spliced transcripts havebeen identified.

CIDEA Antibody (C-term) Blocking peptide - 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)