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CIDEA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14057b

Product Information

Application	WB, E
Primary Accession	O60543
Other Accession	NP_001270.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34139
Calculated MW	24687
Antigen Region	181-209

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.

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).

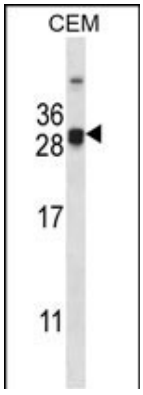
Background

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.

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.