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CIDEC Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP18249c

Specification

CIDEC Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q96AQ7

CIDEC Antibody (Center) Blocking Peptide - Additional Information

Gene ID 63924

Other Names
Cell death activator CIDE-3, Cell death-inducing DFFA-like effector protein C, Fat-specific protein FSP27 homolog, CIDEC, FSP27

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.

CIDEC Antibody (Center) Blocking Peptide - Protein Information

Name CIDEC {ECO:0000303|PubMed:20049731, ECO:0000312|HGNC:HGNC:24229}

Function
Lipid transferase specifically expressed in white adipose tissue, which promotes unilocular lipid droplet formation by mediating lipid droplet fusion (PubMed:18334488, PubMed:19843876, PubMed:20049731, PubMed:23399566, PubMed:30361435). Lipid droplet fusion promotes their enlargement, restricting lipolysis and favoring lipid storage (PubMed:18334488, PubMed:19843876, PubMed:20049731, PubMed:23399566). Localizes on the lipid droplet surface, at focal contact sites between lipid droplets, and mediates atypical lipid droplet fusion by undergoing liquid-liquid phase separation (LLPS) and promoting directional net neutral lipid transfer from the smaller to larger lipid droplets (PubMed:18334488, PubMed:19843876, PubMed:<a

href="http://www.uniprot.org/citations/20049731" target="_blank">20049731, PubMed:23399566). The transfer direction may be driven by the internal pressure difference between the contacting lipid droplet pair (PubMed:18334488, PubMed:19843876, PubMed:20049731, PubMed:23399566). Its role in neutral lipid transfer and lipid droplet enlargement is activated by the interaction with PLIN1 (PubMed:23399566). May also act as a CEBPB coactivator in the white adipose tissue to control the expression of a subset of CEBPB downstream target genes, including SOCS1, SOCS3, TGFB1, TGFBR1, ID2 and XDH (By similarity). When overexpressed in preadipocytes, induces apoptosis or increases cell susceptibility to apoptosis induced by serum deprivation or TGFB treatment (PubMed:12429024).

Cellular Location
Lipid droplet. Endoplasmic reticulum {ECO:0000250|UniProtKB:P56198}. Nucleus {ECO:0000250|UniProtKB:P56198} Note=Diffuses quickly on lipid droplet surface, but becomes trapped and clustered at lipid droplet contact sites, thereby enabling its rapid enrichment at lipid droplet contact sites {ECO:0000250|UniProtKB:P56198}

Tissue Location
Expressed mainly in adipose tissue, small intestine, heart, colon and stomach and, at lower levels, in brain, kidney and liver.

CIDEC Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

CIDEC Antibody (Center) Blocking Peptide - Images

CIDEC Antibody (Center) Blocking Peptide - Background

DNA fragmentation factor (DFF) induces the fragmentationof DNA associated with apoptosis. A novel family of celldeath-inducing DFF45 (MIM 601882)-like effectors (CIDEs), includingCIDEC, can also promote apoptosis (Liang et al., 2003 [PubMed12429024]).

CIDEC Antibody (Center) Blocking Peptide - References

Ito, M., et al. J. Lipid Res. 51(7):1676-1684(2010)Nian, Z., et al. J. Biol. Chem. 285(13):9604-9615(2010)Hall, A.M., et al. Obesity (Silver Spring) 18(2):417-419(2010)Rubio-Cabezas, O., et al. EMBO Mol Med 1(5):280-287(2009)Magnusson, B., et al. Metab. Clin. Exp. 57(9):1307-1313(2008)