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CIDE-A Antibody

Catalog # ASC10053

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O60543
Other Accession	AF041378, 3114595
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	24687
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CIDE-A antibody can be used for detection of CIDE-A by Western blot at 0.5 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	1149
Other Names	CIDE-A Antibody: CIDE-A, Cell death activator CIDE-A, Cell death-inducing DFFA-like effector A, cell death-inducing DFFA-like effector a
Target/Specificity	CIDEA; It has no cross activity to CIDE-B.
Reconstitution & Storage	CIDE-A antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CIDE-A Antibody 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).

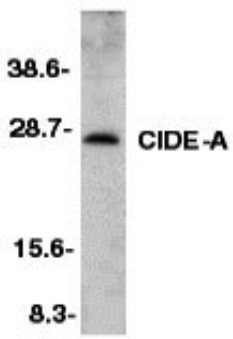
Background

CIDE-A Antibody: Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. These death signals finally cause the degradation of chromosomal DNA by activated DNase. DFF45/ICAD has been identified as inhibitor of caspase activated DNase DFF40/CAD. DFF45 related proteins CIDE-A and CIDE-B (for cell death-inducing DFF-like effector A and B) were recently identified. CIDE contains a new type of domain termed CIDE-N, which has high homology with the regulatory domains of DFF45/ICAD and DFF40/CAD. Expression of CIDE-A induces DNA fragmentation and activates apoptosis, which is inhibited by DFF45. CIDE-A is a DFF45-inhibitable effector that promotes cell death and DNA fragmentation. CIDE-A is expressed in many tissues.

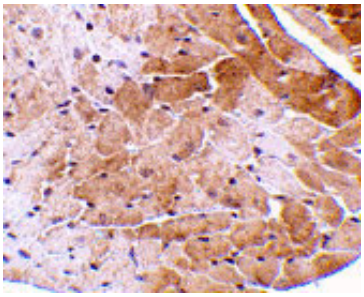
References

Inohara N, Koseki T, Chen S, et al. CIDE, a novel family of cell death activators with homology to the 45 kDa subunit of the DNA fragmentation factor. EMBO J 1998;17:2526-33
Inohara N, Koseki T, Chen S, et al. Identification of regulatory and catalytic domains in the apoptosis nuclease DFF40/CAD. J Biol Chem 1999 ;274:270-4 (RD1299)

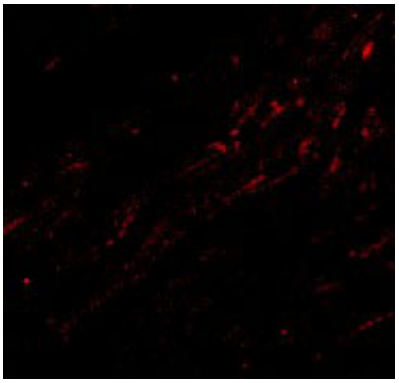
Images



Western blot analysis of CIDE-A in mouse heart tissue lysate with CIDE-A antibody at 1:500 dilution.



Immunohistochemistry of CIDE-A in mouse heart tissue with CIDE-A antibody at 5 µg/mL.



Immunofluorescence of CIDE-A in Mouse Heart cells with CIDE-A antibody at 20 ug/mL.

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