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Anti-CIDEB Antibody

Rabbit polyclonal antibody to CIDEB
Catalog # AP60841

Product Information

Application	WB, IF/IC, IHC
Primary Accession	Q9UHD4
Other Accession	O70303
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24678

Additional Information

Gene ID	27141
Other Names	Cell death activator CIDE-B; Cell death-inducing DFFA-like effector B
Target/Specificity	Recognizes endogenous levels of CIDEB protein.
Dilution	WB~~WB (1/500 - 1/2000), IHC (1/50 - 1/200), IF/IC (1/50 - 1/100) IF/IC~~N/A IHC~~WB (1/500 - 1/2000), IHC (1/50 - 1/200), IF/IC (1/50 - 1/100)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

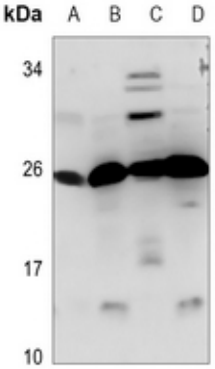
Name	CIDEB {ECO:0000303|PubMed:35939579, ECO:0000312|HGNC:HGNC:1977}
Function	Lipid transferase specifically expressed in hepatocytes, which promotes unilocular lipid droplet formation by mediating lipid droplet fusion (PubMed:35939579). Lipid droplet fusion promotes their enlargement, restricting lipolysis and favoring lipid storage (PubMed:35939579). 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 (By similarity). Promotes lipid exchange and lipid droplet fusion in both small and large lipid droplet- containing hepatocytes (By similarity). In addition to its role in lipid droplet fusion, also involved in cytoplasmic vesicle biogenesis and transport (By similarity). Required for very-low-density lipoprotein (VLDL) lipidation and maturation (By similarity). Probably involved in the biogenesis of VLDL transport vesicles by

	forming a COPII vesicle coat and facilitating the formation of endoplasmic reticulum-derived large vesicles (By similarity). Also involved in sterol-regulated export of the SCAP-SREBP complex, composed of SCAP, SREBF1/SREBP1 and SREBF2/SREBP2, by promoting loading of SCAP-SREBP into COPII vesicles (By similarity). May also activate apoptosis (PubMed:10619428).
Cellular Location	Lipid droplet. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O70303}; Peripheral membrane protein {ECO:0000250|UniProtKB:O70303}; Cytoplasmic side {ECO:0000250|UniProtKB:O70303}. Golgi apparatus {ECO:0000250|UniProtKB:O70303}. Cytoplasmic vesicle, COPI-coated vesicle {ECO:0000250|UniProtKB:O70303}. Note=Enriched at lipid droplet contact sites. {ECO:0000250|UniProtKB:O70303}
Tissue Location	Highly expressed in liver and small intestine and, at lower levels, in colon, kidney and spleen

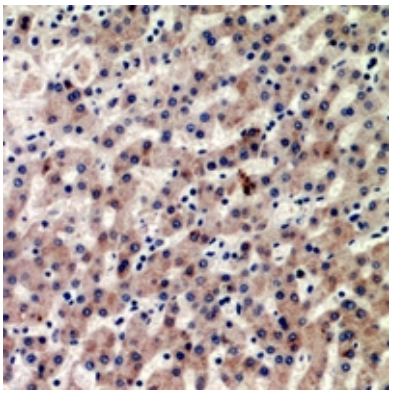
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CIDEB. The exact sequence is proprietary.

Images

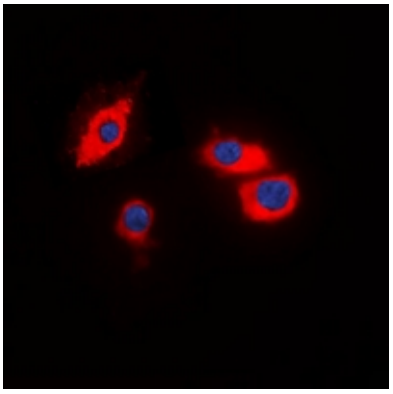


Western blot analysis of CIDEB expression in mouse kidney (A), mouse spleen (B), rat kidney (C), rat spleen (D) whole cell lysates.



Immunohistochemical analysis of CIDEB staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of CIDEB staining in HT29 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight



594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).