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Anti-ZDHHC9 Antibody

Catalog # AP51621

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9Y397
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40916

Additional Information

Gene ID	51114
Other Names	CXorf11; ZDHHC10; ZNF379; ZNF380; Palmitoyltransferase ZDHHC9; Zinc finger DHHC domain-containing protein 9; DHHC-9; DHHC9; Zinc finger protein 379; Zinc finger protein 380
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ZDHHC9. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

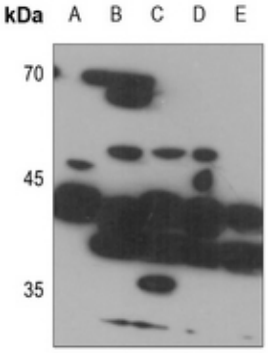
Name	ZDHHC9 {ECO:0000303|PubMed:37802025, ECO:0000312|HGNC:HGNC:18475}
Function	Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates, such as ADRB2, GSDMD, HRAS, NRAS and CGAS (PubMed:16000296, PubMed:27481942, PubMed:37802025, PubMed:38530158, PubMed:38599239). The ZDHHC9-GOLGA7 complex is a palmitoyltransferase specific for HRAS and NRAS (PubMed:16000296). May have a palmitoyltransferase activity toward the beta-2 adrenergic receptor/ADRB2 and therefore regulate G protein-coupled receptor signaling (PubMed:27481942). Acts as a regulator of innate immunity by catalyzing palmitoylation of CGAS, thereby promoting CGAS homodimerization and cyclic GMP-AMP synthase activity (PubMed:37802025). Activates pyroptosis by catalyzing palmitoylation of gasdermin-D (GSDMD), thereby promoting membrane translocation and pore formation of GSDMD (PubMed:38530158, PubMed:38599239).

Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in kidney, skeletal muscle, brain, lung and liver. Absent in thymus, spleen and leukocytes

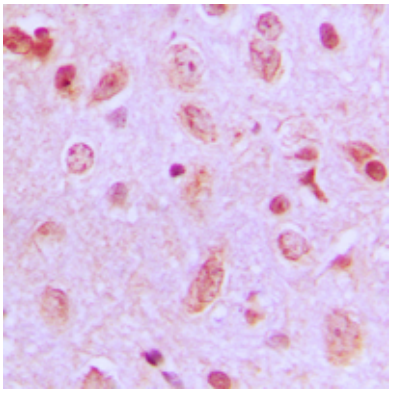
References

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Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.

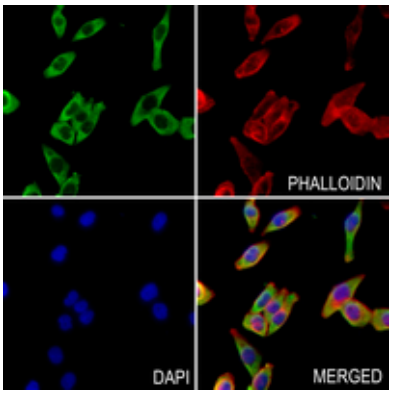
Images



Western blot analysis of ZDHHC9 expression in Hela (A), mouse testis (B), mouse brain (C), rat testis (D), rat brain (E) whole cell lysates. (Predicted band size: 40 kD; Observed band size: 40 kD)



Immunohistochemical analysis of ZDHHC9 staining in human brain 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 ZDHHC9 staining in MCF7 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 AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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