

ZDHC17 Rabbit pAb

Catalog # AP99628

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8IUH5
Other Accession	Q8IUH5
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72640
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ZDHC17
Epitope Specificity	365-460/632
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DHHC palmitoyltransferase family. AKR/ZDHC17 subfamily. Contains 5 ANK repeats. Contains 1 DHHC-type zinc finger.
SUBUNIT	Interacts (via ANK repeats) with HD. This interaction is inversely correlated to the length of the polyglutamine tract added to the huntingtin protein in Huntington disease.
Post-translational modifications	Autopalmitoylated. Autopalmitoylation has a regulatory role in ZDHC17-mediated Mg(2+) transport.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ZDHC17 is a neuronal palmitoyl transferase. Palmitoylation is critical for trafficking and function of signaling molecules, neurotransmitter receptors, and synaptic scaffolding proteins in neurons. ZDHC17 causes cellular transformation. It has been shown that mRNA encoding ZDHC17 is up-regulated in a number of types of human tumors, thus ZDHC17 and other PATs (palmitoyl acyltransferases) are potential targets for new anticancer drugs.

Additional Information

Gene ID	23390
Other Names	DHHC-17; DHHC17; HIP14; HIP3; HSPC294; HYPH; A230053P19Rik; D130071N24Rik; ZDH17_HUMAN; ZDHC17; Acyltransferase ZDHC17; DHHC domain-containing cysteine-rich protein 17 (DHHC17); Huntingtin yeast partner H; Huntingtin-interacting protein 14 (HIP-14); Huntingtin-interacting protein 3 (HIP-3); Huntingtin-interacting protein H; Putative MAPK-activating protein PM11; Putative NF-kappa-B-activating protein 205; Zinc finger DHHC domain-containing protein 17; 2.3.1.225; KIAA0946; ZDH17_MOUSE; DHHC domain-containing cysteine-rich protein 17 (DHHC-17); Huntingtin-interacting protein 14; zDHHC palmitoyltransferase 17; zinc finger DHHC-type containing 17; zinc finger DHHC-type palmitoyltransferase 17

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ZDHHC17 (HGNC:18412)
Function	Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and is involved in a variety of cellular processes (PubMed:15489887, PubMed:15603740, PubMed:24705354, PubMed:27911442, PubMed:28757145). Has no stringent fatty acid selectivity and in addition to palmitate can also transfer onto target proteins myristate from tetradecanoyl-CoA and stearate from octadecanoyl-CoA (By similarity). Palmitoyltransferase specific for a subset of neuronal proteins, including SNAP25, DLG4/PSD95, GAD2, SYT1 and HTT (PubMed:15489887, PubMed:15603740, PubMed:19139280, PubMed:28757145). Also palmitoylates neuronal protein GPM6A as well as SPRED1 and SPRED3 (PubMed:24705354). Could also play a role in axonogenesis through the regulation of NTRK1 and the downstream ERK1/ERK2 signaling cascade (By similarity). May be involved in the sorting or targeting of critical proteins involved in the initiating events of endocytosis at the plasma membrane (PubMed:12393793). May play a role in Mg(2+) transport (PubMed:18794299). Could also palmitoylate DNAJC5 and regulate its localization to the Golgi membrane (By similarity). Palmitoylates CASP6, thereby preventing its dimerization and subsequent activation (PubMed:27911442).
Cellular Location	Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Presynaptic cell membrane; Multi-pass membrane protein. Note=Low extracellular Mg(2+) induces increase in Golgi and in post-Golgi membrane vesicles
Tissue Location	Expressed in all brain regions. Expression is highest in the cortex, cerebellum, occipital lobe and caudate and lowest in the spinal cord. Expression is also seen in testis, pancreas, heart and kidney.

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