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ZDHHC5/ZNF375 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57108

Specification

ZDHHC5/ZNF375 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9C0B5
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**78 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human ZDHHC5/ZNF375**
Epitope Specificity	**621-715/715**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cell Membrane**
SIMILARITY	**Belongs to the DHHC palmitoyltransferase family. ERF2/ZDHHC9 subfamily. Contains 1 DHHC-type zinc finger.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
ZDHHC5 belongs to the DHHC palmitoyltransferase family, ERF2/ZDHHC9 subfamily. Palmitoylation plays a significant role in subcellular trafficking of proteins between membrane compartments, as well as in modulating protein-protein interactions, and is critical for trafficking and function of signaling molecules.

ZDHHC5/ZNF375 Polyclonal Antibody - Additional Information

Gene ID 25921

Other Names
Palmitoyltransferase ZDHHC5, 2.3.1.225, Zinc finger DHHC domain-containing protein 5, DHHC-5, Zinc finger protein 375, ZDHHC5, KIAA1748, ZNF375

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

ZDHHC5/ZNF375 Polyclonal Antibody - Protein Information

Name ZDHHC5 {ECO:0000303|PubMed:38599239, ECO:0000312|HGNC:HGNC:18472}

Function
Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates such as CTNND2, CD36, GSDMD, NLRP3, NOD1, NOD2, STAT3 and S1PR1 thus plays a role in various biological processes including cell adhesion, inflammation, fatty acid uptake, bacterial sensing or cardiac functions (PubMed:21820437, PubMed:29185452, PubMed:31402609, PubMed:31649195, PubMed:34293401, PubMed:38092000, PubMed:38530158, PubMed:38599239). Plays an important role in the regulation of synapse efficacy by mediating palmitoylation of delta-catenin/CTNND2, thereby increasing synaptic delivery and surface stabilization of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid receptors (AMPARs) (PubMed:26334723). Under basal conditions, remains at the synaptic membrane through FYN-mediated phosphorylation that prevents association with endocytic proteins (PubMed:26334723). Neuronal activity enhances the internalization and trafficking of DHHC5 from spines to dendritic shafts where it palmitoylates delta-catenin/CTNND2 (PubMed:26334723). Regulates cell adhesion at the plasma membrane by palmitoylating GOLGA7B and DSG2 (PubMed:31402609). Plays a role in innate immune response by mediating the palmitoylation of NOD1 and NOD2 and their proper recruitment to the bacterial entry site and phagosomes (PubMed:31649195, PubMed:34293401). Also participates in fatty acid uptake by palmitoylating CD36 and thereby targeting it to the plasma membrane (PubMed:32958780). Upon binding of fatty acids to CD36, gets phosphorylated by LYN leading to inactivation and subsequent CD36 caveolar endocytosis (PubMed:32958780). Controls oligodendrocyte development by catalyzing STAT3 palmitoylation (By similarity). Acts as a regulator of inflammatory response by mediating palmitoylation of NLRP3 and GSDMD (PubMed:38092000, PubMed:38530158, PubMed:38599239). Palmitoylates NLRP3 to promote inflammasome assembly and activation (PubMed:38092000). Activates pyroptosis by catalyzing palmitoylation of gasdermin-D (GSDMD), thereby promoting membrane translocation and pore formation of GSDMD (PubMed:38530158, PubMed:38599239).

Cellular Location
Cell membrane; Multi-pass membrane protein. Synapse

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ZDHHC5/ZNF375 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ZDHHC5/ZNF375 Polyclonal Antibody - Images