

**ZDHC5 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16171c****Specification**

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**ZDHC5 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [O9C0B5](#)  
Other Accession [NP\\_056272.2](#)

**ZDHC5 Antibody (Center) Blocking Peptide - Additional Information**

**Gene ID** 25921

**Other Names**

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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ZDHC5 Antibody (Center) Blocking Peptide - Protein Information**

**Name** ZDHHC5

**Synonyms** KIAA1748, ZNF375

**Function**

Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates such as CTNND2, CD36, NOD1, NOD2, STAT3 and S1PR1 thus plays a role in various biological processes including cell adhesion, fatty acid uptake, bacterial sensing or cardiac functions (PubMed: [21820437](http://www.uniprot.org/citations/21820437), PubMed: [29185452](http://www.uniprot.org/citations/29185452), PubMed: [31402609](http://www.uniprot.org/citations/31402609), PubMed: [31649195](http://www.uniprot.org/citations/31649195), PubMed: [34293401](http://www.uniprot.org/citations/34293401)). 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 (AMPA receptors). Under basal conditions, remains at the synaptic membrane through FYN-mediated phosphorylation that prevents association with endocytic proteins (PubMed: [26334723](http://www.uniprot.org/citations/26334723)). Neuronal

activity enhances the internalization and trafficking of DHHC5 from spines to dendritic shafts where it palmitoylates delta-catenin/CTNND2 (PubMed:<a href="http://www.uniprot.org/citations/26334723" target="\_blank">26334723</a>). Regulates cell adhesion at the plasma membrane by palmitoylating GOLGA7B and DSG2 (PubMed:<a href="http://www.uniprot.org/citations/31402609" target="\_blank">31402609</a>). 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:<a href="http://www.uniprot.org/citations/31649195" target="\_blank">31649195</a>, PubMed:<a href="http://www.uniprot.org/citations/34293401" target="\_blank">34293401</a>). Participates also in fatty acid uptake by palmitoylating CD36 and thereby targeting it to the plasma membrane. Upon binding of fatty acids to CD36, gets phosphorylated by LYN leading to inactivation and subsequent CD36 caveolar endocytosis (PubMed:<a href="http://www.uniprot.org/citations/32958780" target="\_blank">32958780</a>). Controls oligodendrocyte development by catalyzing STAT3 palmitoylation (By similarity).

**Cellular Location**

Cell membrane; Multi-pass membrane protein. Synapse

**ZDHC5 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ZDHC5 Antibody (Center) Blocking Peptide - Images****ZDHC5 Antibody (Center) Blocking Peptide - References**

Yang, W., et al. Mol. Cell Proteomics 9(1):54-70(2010)Rikova, K., et al. Cell 131(6):1190-1203(2007)Olsen, J.V., et al. Cell 127(3):635-648(2006)Olsen, J.V., et al. Cell 127(3):635-648(2006)