

ZDHC2 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP5592a**Specification**

ZDHC2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession [O9UIJ5](#)
Other Accession [NP_057437.1](#)

ZDHC2 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 51201

Other Names

Palmitoyltransferase ZDHHC2, Reduced expression associated with metastasis protein, Ream, Reduced expression in cancer protein, Rec, Zinc finger DHHC domain-containing protein 2, DHHC-2, Zinc finger protein 372, ZDHHC2, REAM, REC, ZNF372

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.

ZDHC2 Antibody (N-term) Blocking peptide - Protein Information

Name ZDHHC2 ([HGNC:18469](#))

Synonyms REAM, REC, ZNF372

Function

Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and is involved in a variety of cellular processes (PubMed:18508921, PubMed:18296695, PubMed:19144824, PubMed:21343290, PubMed:22034844, PubMed:23793055). 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). In the nervous system, plays a role in long term synaptic potentiation by palmitoylating AKAP5 through which it regulates protein trafficking from the dendritic recycling endosomes to the plasma membrane and controls both structural and functional plasticity at excitatory synapses (By

similarity). In dendrites, mediates the palmitoylation of DLG4 when synaptic activity decreases and induces synaptic clustering of DLG4 and associated AMPA- type glutamate receptors (By similarity). Also mediates the de novo and turnover palmitoylation of RGS7BP, a shuttle for Gi/o-specific GTPase- activating proteins/GAPs, promoting its localization to the plasma membrane in response to the activation of G protein-coupled receptors. Through the localization of these GTPase-activating proteins/GAPs, it also probably plays a role in G protein-coupled receptors signaling in neurons (By similarity). Also probably plays a role in cell adhesion by palmitoylating CD9 and CD151 to regulate their expression and function (PubMed:18508921). Palmitoylates the endoplasmic reticulum protein CKAP4 and regulates its localization to the plasma membrane (PubMed:18296695, PubMed:19144824). Could also palmitoylate LCK and regulate its localization to the plasma membrane (PubMed:22034844).

Cellular Location

Postsynaptic density {ECO:0000250|UniProtKB:Q9JKR5}. Postsynaptic recycling endosome membrane {ECO:0000250|UniProtKB:P59267}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Note=Translocates to postsynaptic density when synaptic activity decreases. {ECO:0000250|UniProtKB:Q9JKR5}

Tissue Location

Ubiquitously expressed (PubMed:10918388, PubMed:22034844). Reduced expression in colorectal cancers with liver metastasis (PubMed:10918388).

ZDHC2 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ZDHC2 Antibody (N-term) Blocking peptide - Images

ZDHC2 Antibody (N-term) Blocking peptide - Background

Palmitoyltransferase specific for GAP43 and DLG4/PSD95 (By similarity).

ZDHC2 Antibody (N-term) Blocking peptide - References

Planey, S.L., et al. Mol. Biol. Cell 20(5):1454-1463(2009)Sharma, C., et al. Mol. Biol. Cell 19(8):3415-3425(2008)Zhang, J., et al. Mol. Cell Proteomics 7(7):1378-1388(2008)Li, B., et al. J. Biol. Chem. 277(32):28870-28876(2002)Oyama, T., et al. Genes Chromosomes Cancer 29(1):9-15(2000)