

**ZDHC2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
Catalog # AP5592a

## Specification

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### ZDHC2 Antibody (N-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O9UIJ5</a>
Other Accession	<a href="#">NP_057437.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	77-106

### ZDHC2 Antibody (N-term) - 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

#### Target/Specificity

This ZDHC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 77-106 amino acids of human ZDHC2.

#### Dilution

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

ZDHC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ZDHC2 Antibody (N-term) - 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:[18296695](#), PubMed:[18508921](#), 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}

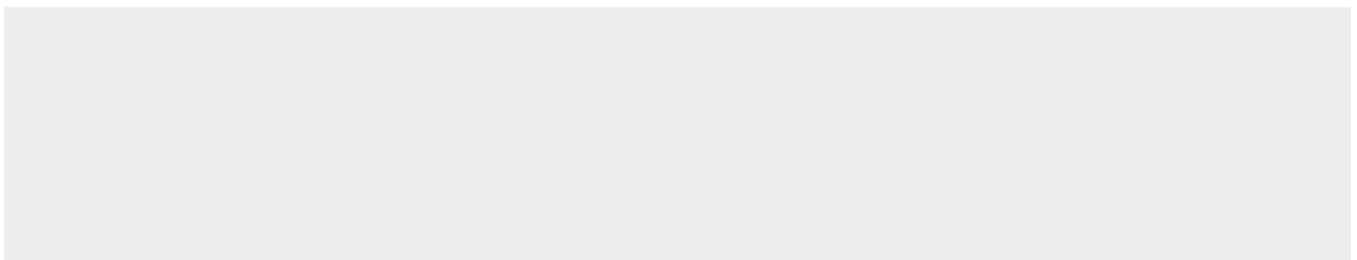
**Tissue Location**

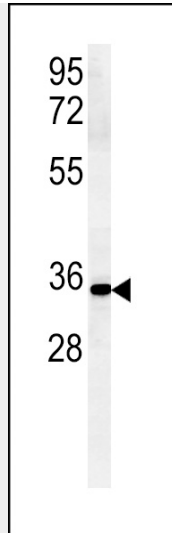
Ubiquitously expressed (PubMed:10918388, PubMed:22034844). Reduced expression in colorectal cancers with liver metastasis (PubMed:10918388).

**ZDHC2 Antibody (N-term) - Protocols**

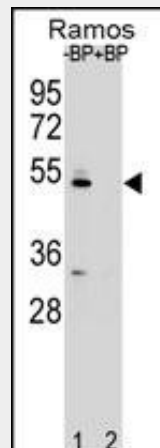
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

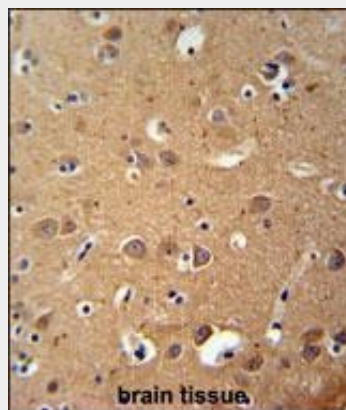
**ZDHC2 Antibody (N-term) - Images**



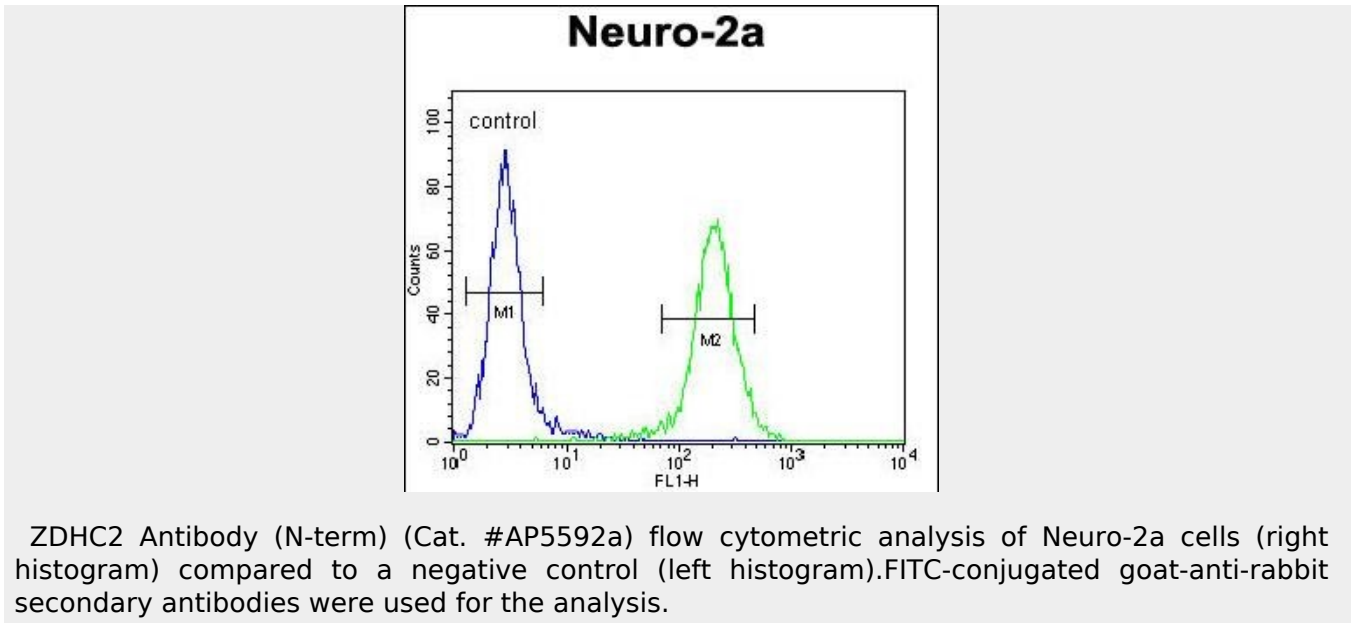
ZDHC2 Antibody (N-term) (Cat. #AP5592a) western blot analysis in mouse Neuro-2a cell line lysates (15ug/lane). This demonstrates the ZDHC2 antibody detected the ZDHC2 protein (arrow).



Western blot analysis of ZDHC2 Antibody (N-term) Pab (Cat. #AP5592a) pre-incubated without (lane 1) and with (lane 2) blocking peptide in Ramos cell line lysate. ZDHC2 Antibody (N-term) (arrow) was detected using the purified Pab.



ZDHC2 Antibody (N-term) (Cat. #AP5592a) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ZDHC2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



#### **ZDHC2 Antibody (N-term) - Background**

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

#### **ZDHC2 Antibody (N-term) - 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)

#### **ZDHC2 Antibody (N-term) - Citations**

- [Inhibition of MiR-155 suppresses cell migration in nasopharyngeal carcinoma through targeting ZDHHC2.](#)
- [A critical role for ZDHHC2 in metastasis and recurrence in human hepatocellular carcinoma.](#)
- [Reduced expression of ZDHHC2 is associated with lymph node metastasis and poor prognosis in gastric adenocarcinoma.](#)