

# ZDHHC2 (S-16): sc-98219

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZDHHC2 (zinc finger, DHHC-type containing 2), also known as DHHC2, ZNF372, REAM or REC, is a 367 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger. The ubiquitously expressed ZDHHC2 protein functions as a palmitoyltransferase that uses palmitoyl-CoA and catalyzes the conversion of target proteins, namely GAP-43 and PSD-95, to S-palmitoyl proteins. Defects in the gene encoding ZDHHC2 are found in colorectal cancer and hepatocellular carcinoma, suggesting a role for ZDHHC2 in tumorigenesis. The gene encoding human ZDHHC2 maps to chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

## REFERENCES

- Wildenauer, D.B., et al. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
- Putilina, T., et al. 1999. The DHHC domain: a new highly conserved cysteine-rich motif. *Mol. Cell. Biochem.* 195: 219-226.
- Oyama, T., et al. 2000. Isolation of a novel gene on 8p21.3-22 whose expression is reduced significantly in human colorectal cancers with liver metastasis. *Genes Chromosomes Cancer* 29: 9-15.
- Li, B., et al. 2002. APH2, a protein with a zf-DHHC motif, interacts with c-Abl and has pro-apoptotic activity. *J. Biol. Chem.* 277: 28870-28876.
- Roth, A.F., et al. 2002. The yeast DHHC cysteine-rich domain protein Akr1p is a palmitoyltransferase. *J. Cell Biol.* 159: 23-28.
- Pils, D., et al. 2005. Five genes from chromosomal band 8p22 are significantly downregulated in ovarian carcinoma: N33 and EFA6R have a potential impact on overall survival. *Cancer* 104: 2417-2429.

## CHROMOSOMAL LOCATION

Genetic locus: ZDHHC2 (human) mapping to 8p22; Zdhhc2 (mouse) mapping to 8 A4.

## SOURCE

ZDHHC2 (S-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZDHHC2 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98219 X, 100 µg/0.1 ml.

## APPLICATIONS

ZDHHC2 (S-16) is recommended for detection of ZDHHC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZDHHC family members.

ZDHHC2 (S-16) is also recommended for detection of ZDHHC2 in additional species, including equine, canine, bovine and porcine.

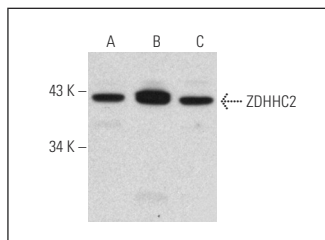
Suitable for use as control antibody for ZDHHC2 siRNA (h): sc-77478, ZDHHC2 siRNA (m): sc-155497, ZDHHC2 shRNA Plasmid (h): sc-77478-SH, ZDHHC2 shRNA Plasmid (m): sc-155497-SH, ZDHHC2 shRNA (h) Lentiviral Particles: sc-77478-V and ZDHHC2 shRNA (m) Lentiviral Particles: sc-155497-V.

ZDHHC2 (S-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZDHHC2: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or MIA PaCa-2 cell lysate: sc-2285.

## DATA



ZDHHC2 (S-16): sc-98219. Western blot analysis of ZDHHC2 expression in HeLa (A), Jurkat (B) and MIA PaCa-2 (C) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **ZDHHC2 (C-2): sc-515204**, our highly recommended monoclonal alternative to ZDHHC2 (S-16).