

# ZDHHC2 (C-2): sc-515204

## 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.
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- 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

ZDHHC2 (C-2) is a mouse monoclonal antibody raised against amino acids 303-367 mapping at the C-terminus of ZDHHC2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515204 X, 200 µg/0.1 ml.

ZDHHC2 (C-2) is available conjugated to agarose (sc-515204 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515204 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515204 PE), fluorescein (sc-515204 FITC), Alexa Fluor® 488 (sc-515204 AF488), Alexa Fluor® 546 (sc-515204 AF546), Alexa Fluor® 594 (sc-515204 AF594) or Alexa Fluor® 647 (sc-515204 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515204 AF680) or Alexa Fluor® 790 (sc-515204 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ZDHHC2 (C-2) is recommended for detection of ZDHHC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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 (C-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

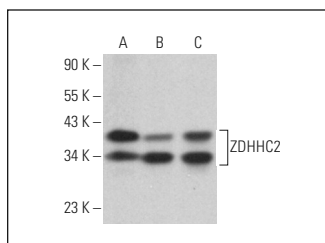
Molecular Weight of ZDHHC2: 42 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



ZDHHC2 (C-2): sc-515204. Western blot analysis of ZDHHC2 expression in Neuro-2A (A), HeLa (B) and Jurkat (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.