

ZDHHC14 (C-20): sc-249402

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. ZDHHC14 (zinc finger, DHHC-type containing 14), also known as DHHC-14 or NEW1CP, is a 488 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger. The DHHC domain is required for the primary function of ZDHHC14 as a palmitoyltransferase, to catalyze the transformation of palmitoyl-CoA and a cysteine-conjugated protein to an S-palmitoyl protein and free CoA. The gene encoding ZDHHC14 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Two isoforms of ZDHHC14 exist as a result of alternative splicing events.

REFERENCES

1. Putilina, T., Wong, P. and Gentleman, S. 1999. The DHHC domain: a new highly conserved cysteine-rich motif. *Mol. Cell. Biochem.* 195: 219-226.
2. Roth, A.F., Feng, Y., Chen, L. and Davis, N.G. 2002. The yeast DHHC cysteine-rich domain protein Akr1p is a palmitoyl transferase. *J. Cell Biol.* 159: 23-28.
3. Ohno, Y., Kihara, A., Sano, T. and Igarashi, Y. 2006. Intracellular localization and tissue-specific distribution of human and yeast DHHC cysteine-rich domain-containing proteins. *Biochim. Biophys. Acta* 1761: 474-483.
4. Rinaldi, A., Kwee, I., Poretti, G., Mensah, A., Pruneri, G., Capello, D., Rossi, D., Zucca, E., Ponzoni, M., Catapano, C., Tibiletti, M.G., Paulli, M., Gaidano, G. and Bertoni, F. 2006. Comparative genome-wide profiling of post-transplant lymphoproliferative disorders and diffuse large B-cell lymphomas. *Br. J. Haematol.* 134: 27-36.
5. Dephoure, N., Zhou, C., Villén, J., Beausoleil, S.A., Bakalarski, C.E., Elledge, S.J. and Gygi, S.P. 2008. A quantitative atlas of mitotic phosphorylation. *Proc. Natl. Acad. Sci. USA* 105: 10762-10767.
6. Lavarías, S., Pasquevich, M.Y., Dreon, M.S. and Heras, H. 2009. Partial characterization of a malonyl-CoA-sensitive carnitine O-palmitoyltransferase I from *Macrobrachium borellii* (Crustacea: Palaemonidae). *Comp. Biochem. Physiol. B, Biochem. Mol. Biol.* 152: 364-369.

CHROMOSOMAL LOCATION

Genetic locus: ZDHHC14 (human) mapping to 6q25.3; Zdhhc14 (mouse) mapping to 17 A1.

SOURCE

ZDHHC14 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ZDHHC14 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249402 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZDHHC14 (C-20) is recommended for detection of ZDHHC14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

ZDHHC14 (C-20) is also recommended for detection of ZDHHC14 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZDHHC14 siRNA (h): sc-95174, ZDHHC14 siRNA (m): sc-155492, ZDHHC14 shRNA Plasmid (h): sc-95174-SH, ZDHHC14 shRNA Plasmid (m): sc-155492-SH, ZDHHC14 shRNA (h) Lentiviral Particles: sc-95174-V and ZDHHC14 shRNA (m) Lentiviral Particles: sc-155492-V.

Molecular Weight of ZDHHC14: 53 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.