

ZDHHC12 (C-14): sc-138733

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. ZDHHC12 (zinc finger, DHHC domain containing 12), also known as ZNF400, is a 267 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger and is thought to function as a palmitoyltransferase, catalyzing the transformation of palmitoyl-CoA and a cysteine-conjugated protein to a S-palmitoyl protein and free CoA. Three isoforms exist due to alternative splicing events. The gene encoding ZDHHC12 maps to human chromosome 9, which consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Chromosome 9 is considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype.

REFERENCES

1. Putilina, T., et al. 1999. The DHHC domain: a new highly conserved cysteine-rich motif. *Mol. Cell. Biochem.* 195: 219-226.
2. Roth, A.F., et al. 2002. The yeast DHHC cysteine-rich domain protein Akr1p is a palmitoyl transferase. *J. Cell Biol.* 159: 23-28.
3. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
4. Ohno, Y., et al. 2006. Intracellular localization and tissue-specific distribution of human and yeast DHHC cysteine-rich domain-containing proteins. *Biochim. Biophys. Acta* 1761: 474-483.
5. Mitchell, D.A., et al. 2006. Protein palmitoylation by a family of DHHC protein S-acyltransferases. *J. Lipid Res.* 47: 1118-1127.

CHROMOSOMAL LOCATION

Genetic locus: ZDHHC12 (human) mapping to 9q34.11; Zdhhc12 (mouse) mapping to 2 B.

SOURCE

ZDHHC12 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ZDHHC12 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-138733 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ZDHHC12 (C-14) is recommended for detection of ZDHHC12 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZDHHC family members.

ZDHHC12 (C-14) is also recommended for detection of ZDHHC12 in additional species, including equine, bovine and porcine.

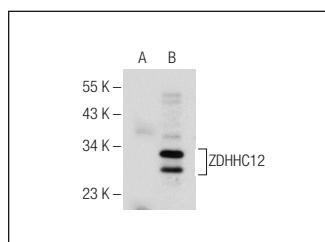
Suitable for use as control antibody for ZDHHC12 siRNA (h): sc-92671, ZDHHC12 siRNA (m): sc-155491, ZDHHC12 siRNA (h): sc-92671-SH, ZDHHC12 shRNA Plasmid (m): sc-155491-SH, ZDHHC12 siRNA (h): sc-92671-V and ZDHHC12 shRNA (m) Lentiviral Particles: sc-155491-V.

Molecular Weight of ZDHHC12: 31 kDa.

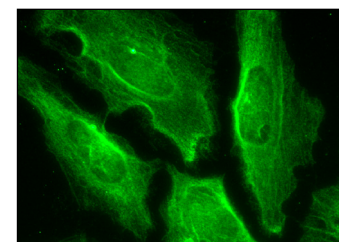
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZDHHC12 (C-14): sc-138733. Western blot analysis of ZDHHC12 expression in non-transfected: sc-117752 (A) and mouse ZDHHC12 transfected: sc-127802 (B) 293T whole cell lysates.



ZDHHC12 (C-14): sc-138733. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

RESEARCH USE

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