

ZDHHC4 (T-11): sc-137955

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. ZDHHC4 (zinc finger, DHHC domain containing 4), also known as ZNF374, is a 344 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. The gene encoding ZDHHC4 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

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2. Nagase, T., et al. 2001. Prediction of the coding sequences of unidentified human genes. XX. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 8: 85-95.
3. Roth, A.F., et al. 2002. The yeast DHHC cysteine-rich domain protein Akr1p is a palmitoyl transferase. *J. Cell Biol.* 159: 23-28.
4. Mitchell, D.A., et al. 2006. Protein palmitoylation by a family of DHHC protein S-acyltransferases. *J. Lipid Res.* 47: 1118-1127.
5. 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.
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CHROMOSOMAL LOCATION

Genetic locus: ZDHHC4 (human) mapping to 7p22.1; Zdhhc4 (mouse) mapping to 5 G2.

SOURCE

ZDHHC4 (T-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZDHHC4 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-137955 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.

APPLICATIONS

ZDHHC4 (T-11) is recommended for detection of ZDHHC4 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.

ZDHHC4 (T-11) is also recommended for detection of ZDHHC4 in additional species, including equine and bovine.

Suitable for use as control antibody for ZDHHC4 siRNA (h): sc-89638, ZDHHC4 siRNA (m): sc-155504, ZDHHC4 shRNA Plasmid (h): sc-89638-SH, ZDHHC4 shRNA Plasmid (m): sc-155504-SH, ZDHHC4 shRNA (h) Lentiviral Particles: sc-89638-V and ZDHHC4 shRNA (m) Lentiviral Particles: sc-155504-V.

Molecular Weight of ZDHHC4: 39 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.

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.