ZDHHC19 (S-15): sc-103345



The Power to Question

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. ZDHHC19 (zinc finger, DHHC domain containing 19) is a 309 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 ZDHHC19 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- 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.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. (Mosk.) 37: 194-211.
- 4. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
- 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.
- Mitchell, D.A., et al. 2006. Protein palmitoylation by a family of DHHC protein S-acyltransferases. J. Lipid Res. 47: 1118-1127.
- 7. Raymond, F.L., et al. 2007. Mutations in ZDHHC9, which encodes a palmitoyltransferase of NRAS and HRAS, cause X-linked mental retardation associated with a Marfanoid habitus. Am. J. Hum. Genet. 80: 982-987.
- 8. Yamamoto, Y., et al. 2007. Gain of 5p15.33 is associated with progression of bladder cancer. Oncology 72: 132-138.
- 9. Goobie, S., et al. 2008. Molecular and clinical characterization of *de novo* and familial cases with microduplication 3q29: guidelines for copy number variation case reporting. Cytogenet. Genome Res. 123: 65-78.

CHROMOSOMAL LOCATION

Genetic locus: ZDHHC19 (human) mapping to 3q29.

SOURCE

ZDHHC19 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZDHHC19 of human origin.

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.

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-103345 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZDHHC19 (S-15) is recommended for detection of ZDHHC19 of 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.

Suitable for use as control antibody for ZDHHC19 siRNA (h): sc-78147, ZDHHC19 shRNA Plasmid (h): sc-78147-SH and ZDHHC19 shRNA (h) Lentiviral Particles: sc-78147-V.

Molecular Weight of ZDHHC19: 34 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.

PROTOCOLS

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

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