# SANTA CRUZ BIOTECHNOLOGY, INC.

# ZDHHC16 (S-23): sc-134158



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. ZDHHC16 (zinc finger, DHHC-type containing 16), also known as APH2, is a 377 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and contains one DHHC-type zinc finger. Existing as multiple alternatively spliced isoforms, ZDHHC16 interacts with c-Abl and catalyzes the conversion of Palmitoyl-CoA and protein-cysteine to S-palmitoyl protein and CoA. Via its association with c-Abl, ZDHHC16 may be involved in the regulation of apoptosis. The gene encoding ZDHHC16 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

# REFERENCES

- 1. Laneuville, P. 1995. Abl tyrosine protein kinase. Semin. Immunol. 7: 255-266.
- Wang, J.Y. 2000. Regulation of cell death by the Abl tyrosine kinase. Oncogene 19: 5643-5650.
- Li, B., Cong, F., Tan, C.P., Wang, S.X. and Goff, S.P. 2002. Aph2, a protein with a zf-DHHC motif, interacts with c-Abl and has pro-apoptotic activity. J. Biol. Chem. 277: 28870-28876.
- Berger, P., Young, P. and Suter, U. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
- 5. Hantschel, O. and Superti-Furga, G. 2004. Regulation of the c-Abl and Bcr-Abl tyrosine kinases. Nat. Rev. Mol. Cell Biol. 5: 33-44.
- Zhang, F., Di, Y., Li, J., Shi, Y., Zhang, L., Wang, C., He, X., Liu, Y., Wan, D., Huo, K. and Gu, J. 2006. Molecular cloning and characterization of human Aph2 gene, involved in AP-1 regulation by interaction with JAB1. Biochim. Biophys. Acta 1759: 514-525.

#### CHROMOSOMAL LOCATION

Genetic locus: ZDHHC16 (human) mapping to 10q24.1; Zdhhc16 (mouse) mapping to 19 C3.

#### SOURCE

ZDHHC16 (S-23) is an affinity purified rabbit polyclonal antibody raised against synthetic ZDHHC16 peptide of human origin.

# PRODUCT

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

ZDHHC16 (S-23) is recommended for detection of ZDHHC16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZDHHC16 siRNA (h): sc-90591, ZDHHC16 siRNA (m): sc-155494, ZDHHC16 shRNA Plasmid (h): sc-90591-SH, ZDHHC16 shRNA Plasmid (m): sc-155494-SH, ZDHHC16 shRNA (h) Lentiviral Particles: sc-90591-V and ZDHHC16 shRNA (m) Lentiviral Particles: sc-155494-V.

Molecular Weight (predicted) of ZDHHC16: 44 kDa.

Molecular Weight (observed) of ZDHHC16: 50 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

#### **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).

DATA





ZDHHC16 (S-23): sc-134158. Western blot analysis of ZDHHC16 expression in Jurkat whole cell lysate.

ZDHHC16 (S-23): sc-134158. Western blot analysis of ZDHHC16 expression in K-562 whole cell lysate.

#### 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.