SANTA CRUZ BIOTECHNOLOGY, INC.

VCPIP1 (N-12): sc-98199



BACKGROUND

VCPIP1 (valosin containing protein (p97)/p47 complex interacting protein 1), also known as DUBA3 or VCIP135, is a 1,222 amino acid protein that contains one OTU domain and localizes to the endoplasmic reticulum (ER), as well as to Golgi stacks within the Golgi apparatus. Interacting with VCP (valosincontaining protein) and p47, VCPIP1 functions as a deubiquitinating enzyme that is necessary for post-mitotic Golgi stack formation and may also play a role in the VCP-mediated creation of the transitional ER (tER). The gene encoding VCPIP1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

REFERENCES

- Uchiyama, K., Jokitalo, E., Kano, F., Murata, M., Zhang, X., Canas, B., Newman, R., Rabouille, C., Pappin, D., Freemont, P. and Kondo, H. 2002. VCIP135, a novel essential factor for p97/p47-mediated membrane fusion, is required for Golgi and ER assembly *in vivo*. J. Cell Biol. 159: 855-866.
- Ficarro, S., Chertihin, O., Westbrook, V.A., White, F., Jayes, F., Kalab, P., Marto, J.A., Shabanowitz, J., Herr, J.C., Hunt, D.F. and Visconti, P.E. 2003. Phosphoproteome analysis of capacitated human sperm. Evidence of tyrosine phosphorylation of a kinase-anchoring protein 3 and valosin-containing protein/p97 during capacitation. J. Biol. Chem. 278: 11579-11589.
- Wang, Y., Satoh, A., Warren, G., Meyer, H.H. and Wang, Y. 2004. VCIP135 acts as a deubiquitinating enzyme during p97-p47-mediated reassembly of mitotic Golgi fragments. J. Cell Biol. 164: 973-978.
- Kano, F., Kondo, H., Yamamoto, A., Kaneko, Y., Uchiyama, K., Hosokawa, N., Nagata, K. and Murata, M. 2005. NSF/SNAPs and p97/p47/VCIP135 are sequentially required for cell cycle-dependent reformation of the ER network. Genes Cells 10: 989-999.
- Uchiyama, K. and Kondo, H. 2005. p97/p47-mediated biogenesis of Golgi and ER. J. Biochem. 137: 115-119.
- Uchiyama, K., Totsukawa, G., Puhka, M., Kaneko, Y., Jokitalo, E., Dreveny, I., Beuron, F., Zhang, X., Freemont, P. and Kondo, H. 2006. p37 is a p97 adaptor required for Golgi and ER biogenesis in interphase and at the end of mitosis. Dev. Cell 11: 803-816.
- 7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611745. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: VCPIP1 (human) mapping to 8q13.1; Vcpip1 (mouse) mapping to 1 A2.

SOURCE

VCPIP1 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of VCPIP1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98199 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VCPIP1 (N-12) is recommended for detection of VCPIP1 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).

VCPIP1 (N-12) is also recommended for detection of VCPIP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VCPIP1 siRNA (h): sc-77549, VCPIP1 siRNA (m): sc-155098, VCPIP1 shRNA Plasmid (h): sc-77549-SH, VCPIP1 shRNA Plasmid (m): sc-155098-SH, VCPIP1 shRNA (h) Lentiviral Particles: sc-77549-V and VCPIP1 shRNA (m) Lentiviral Particles: sc-155098-V.

Molecular Weight of VCPIP1: 135 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) Immunofluo-rescence: 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.

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.

MONOS Satisfation Guaranteed

Try **VCPIP1 (C-12): sc-515291**, our highly recommended monoclonal alternative to VCPIP1 (N-12).