VLP (G-13): sc-165874



The Power to Question

BACKGROUND

Individuals harboring germline mutations in the tumor suppressor gene Von Hippel-Lindau (VHL) exhibit an increased susceptibility to a variety of tumors including renal carcinoma, hemangioblastoma of the central nervous system and pheochromocytoma. VLP (Von Hippel-Lindau-like protein), also known as VHLL, is a 139 amino acid protein encoded by a gene that maps to human chromosome 1q22. The VLP gene lacks one of two domains that are required for VHL function, and can be considered a retrotransposed pseudogene of the VHL locus located on chromosome 3. Abundantly expressed in placenta, VLP may play a role in placental development by regulating oxygen homeostasis and neovascularization. VLP likely also serves as a protector of HIF-1 by functioning as a dominant-negative VHL.

REFERENCES

- Bradley, J.F. and Rothberg, P.G. 1999. Processed pseudogene from the von Hippel-Lindau disease gene is located on human chromosome 1. Diagn. Mol. Pathol. 8: 101-106.
- Qi, H., Gervais, M.L., Li, W., DeCaprio, J.A., Challis, J.R. and Ohh, M. 2004. Molecular cloning and characterization of the von Hippel-Lindau-like protein. Mol. Cancer Res. 2: 43-52.
- 3. González Escobar, A.B., Morillo Sánchez, M.J. and García-Campos, J.M. 2012. Von Hippel-Lindau disease: family study. Arch. Soc. Esp. Oftalmol. 87: 368-372.
- 4. D'Elia, A.V., Grimaldi, F., Pizzolitto, S., De Maglio, G., Bregant, E., Passon, N., Franzoni, A., Verrienti, A., Tamburrano, G., Durante, C., Filetti, S., Fogolari, F., Russo, D. and Damante, G. 2012. A new germline VHL gene mutation in three patients with apparently sporadic pheochromocytoma. Clin. Endocrinol. 78: 391-397.
- Taylor, S.R., Singh, J., Sagoo, M.S. and Lightman, S.L. 2012. Clinical and molecular features associated with cystic visceral lesions in von hippellindau disease. Open Ophthalmol. J. 6: 83-85.

CHROMOSOMAL LOCATION

Genetic locus: VHLL (human) mapping to 1q22.

SOURCE

VLP (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VLP of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165874 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

VLP (G-13) is recommended for detection of VLP 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).

Suitable for use as control antibody for VLP siRNA (h): sc-88073, VLP shRNA Plasmid (h): sc-88073-SH and VLP shRNA (h) Lentiviral Particles: sc-88073-V.

Molecular Weight of VLP: 16 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com