SANTA CRUZ BIOTECHNOLOGY, INC.

VCC-1 (P-13): sc-169781

BACKGROUND

VCC-1 (VEGF co-regulated chemokine 1), also known as Dcip1, DMC (dendritic cell and monocyte chemokine-like protein) or CXCL17 (C-X-C motif chemokine 17), is a 119 amino acid secreted protein that plays a role in angiogenesis. A member of the intercrine α (chemokine CxC) family, VCC-1 is expressed in skeletal muscle, trachea, lung, intestine and stomach, and is upregulated in duodenal mucosa of patients with acute cholera, as well as breast tumors. VCC-1 is considered a housekeeping chemokine for the movement of immature dendritic cells and non-activated blood monocytes into tissues, and is though to be involved in the innate immune response. The gene encoding VCC-1 maps to human chromosome 19q13.2 and mouse chromosome 7 A3.

REFERENCES

1. Zhang, Z., et al. 2004. Signal peptide prediction based on analysis of experimentally verified cleavage sites. Protein Sci. 13: 2819-2824.
2. Weinstein, E.J., et al. 2006. VCC-1, a novel chemokine, promotes tumor growth. Biochem. Biophys. Res. Commun. 350: 74-81.
3. Zlotnik, A., et al. 2006. The chemokine and chemokine receptor superfamilies and their molecular evolution. Genome Biol. 7: 243.
4. Pisabarro, M.T., et al. 2006. Cutting edge: novel human dendritic cell- and monocyte-attracting chemokine-like protein identified by fold recognition methods. J. Immunol. 176: 2069-2073.
5. Flach, C.F., et al. 2007. Broad up-regulation of innate defense factors during acute cholera. Infect. Immun. 75: 2343-2350.
6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611387. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Mu, X., et al. 2009. Overexpression of VCC-1 gene in human hepatocellular carcinoma cells promotes cell proliferation and invasion. Acta Biochim. Biophys. Sin. 41: 631-637.
8. Hiraoka, N., et al. 2011. CXCL17 and ICAM2 are associated with a potential anti-tumor immune response in early intraepithelial stages of human pancreatic carcinogenesis. Gastroenterology 140: 310-321.

CHROMOSOMAL LOCATION

Genetic locus: Cxcl17 (rat) mapping to 1q21.

SOURCE

VCC-1 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VCC-1 of rat origin.

STORAGE

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

PROTOCOLS

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

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-169781 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VCC-1 (P-13) is recommended for detection of VCC-1 of rat 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).

Molecular Weight of VCC-1: 14 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.