# SANTA CRUZ BIOTECHNOLOGY, INC.

# Vasculin (P-20): sc-49775



## BACKGROUND

Vascular wall-linked protein, or Vasculin, is primarily ex-pressed in the arterial wall and in plasma. It is also differentially expressed in human atherogenesis. Alternative splicing of exon 3 of the Vasculin gene produces variants. Vasculin binds to and activates the minimal self-sufficient promoter element (MSPE) of the mouse Ada gene promoter and binds to and partially suppresses the GC-rich promoter of the nonhomologous human TOP2A gene promoter. It acts as a nuclear factor that can form complexes with TATA-binding proteins, transcription factors TFIIB and TFIIF, RNA polymerase II and p300. The regulated expression of Vasculin in plaques suggests that it may be involved in atherogenesis, and its presence in plasma may implicate Vasculin as a marker for atherosclerosis.

## REFERENCES

- Boisseau, M.R. 1998. Venous valves in the legs: hemodynamic and biological problems and relationship to physiopathology. J. Mal. Vasc. 22: 122-127.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608412. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Bijnens, A.P., Gils, A., Jutten, B., Faber, B.C., Heeneman, S., Kitslaar, P.J., Tordoir, J.H., de Vries, C.J., Kroon, A.A., Daemen, M.J. and Cleutjens, K.B. 2003. Vasculin, a novel vascular protein differentially expressed in human atherogenesis. Blood 102: 2803-2810.
- Hsu, L.C., Liu, S., Abedinpour, F., Beech, R.D., Lahti, J.M., Kidd, V.J., Greenspan, J.A. and Yeung, C.Y. 2003. The murine G<sup>+</sup>C-rich promoter binding protein mGPBP is required for promoter-specific transcription. Mol. Cell. Biol. 23: 8773-8785.

# CHROMOSOMAL LOCATION

Genetic locus: GPBP1 (human) mapping to 5q11.2; Gpbp1 (mouse) mapping to 13 D2.2.

# SOURCE

Vasculin (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Vasculin of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49775 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### **APPLICATIONS**

Vasculin (P-20) is recommended for detection of Vasculin 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)], 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).

Vasculin (P-20) is also recommended for detection of Vasculin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Vasculin siRNA (h): sc-61774, Vasculin siRNA (m): sc-61775, Vasculin shRNA Plasmid (h): sc-61774-SH, Vasculin shRNA Plasmid (m): sc-61775-SH, Vasculin shRNA (h) Lentiviral Particles: sc-61774-V and Vasculin shRNA (m) Lentiviral Particles: sc-61775-V.

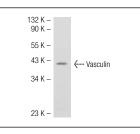
Molecular Weight of Vasculin: 45 kDa.

Positive Controls: mouse liver extract: sc-2256, THP-1 cell lysate: sc-2238 or A-10 cell lysate: sc-3806.

# **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



Vasculin (P-20): sc-49775. Western blot analysis of Vasculin expression in mouse liver tissue extract.

#### PROTOCOLS

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