# SANTA CRUZ BIOTECHNOLOGY, INC.

# Vasorin (H-167) : sc-134551



BACKGROUND

Vasorin (SLITL2, slit-like 2 *(Drosophila))* is a secreted type I membrane protein that participates in vertebrate axis patterning, axon guidance, and vessel development. Vasorin contains tandem leucine-rich repeats, an EGF-like motif and a fibronectin type III-like motif in the extracellular domain. Vasorin transcripts appear in aorta, with moderate expression in kidney and placenta. Vasorin directly binds to transforming growth factor (TGF) $\beta$  and attenuates TGF $\beta$  signaling *in vitro*. Downregulation of Vasorin expression contributes to neointimal formation after vascular injury and this mechanism modulates response to pathological stimuli in vessel walls. Subsequently, Vasorin is a potential therapeutic target for vascular fibroproliferative disorders.

# REFERENCES

- 1. Grainger, D.J. 2004. Transforming growth factor  $\beta$  and atherosclerosis: so far, so good protective cytokine hypothesis. Arterioscler. Thromb. Vasc. Biol. 24: 399-404.
- 2. Ikeda, Y., et al. 2004. Vasorin, a transforming growth factor  $\beta$ -binding protein expressed in vascular smooth muscle cells, modulates the arterial response to injury *in vivo*. Proc. Natl. Acad. Sci. USA 101: 10732-10737.
- 3. Bertolino, P., et al. 2005. Transforming growth factor  $\beta$  signal transduction in angiogenesis and vascular disorders. Chest 128: 585S-590S.
- Chen, L., et al. 2005. Slit-like 2, a central neural and vascular morphogenesis. Biochem. Biophys. Res. Commun. 336: 364-371.
- 5. Ghosh, J., et al. 2005. The role of transforming growth factor  $\beta$ 1 in the vascular system. Cardiovasc. Pathol. 14: 28-36.
- Ishisaki, A., et al. 2006. Novel ideas of gene therapy for atherosclerosis: modulation transduction of TGFβ family. Curr. Pharm. Des. 12: 877-886.

# CHROMOSOMAL LOCATION

Genetic locus: VASN (human) mapping to 16p13.3; Vasn (mouse) mapping to 16 A1.

# SOURCE

Vasorin (H-167) is a rabbit polyclonal antibody raised against amino acids 434-600 mapping near the C-terminus of Vasorin 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.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

# APPLICATIONS

Vasorin (H-167) is recommended for detection of Vasorin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Vasorin (H-167) is also recommended for detection of Vasorin in additional species, including equine.

Suitable for use as control antibody for Vasorin siRNA (h): sc-61778, Vasorin siRNA (m): sc-61779, Vasorin shRNA Plasmid (h): sc-61778-SH, Vasorin shRNA Plasmid (m): sc-61779-SH, Vasorin shRNA (h) Lentiviral Particles: sc-61778-V and Vasorin shRNA (m) Lentiviral Particles: sc-61779-V.

Molecular Weight of Vasorin: 110 kDa.

Positive Controls: mouse heart extract: sc-2254.

# **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 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<sup>™</sup> Mounting Medium: sc-24941.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# MONOS Satisfation Guaranteed

Try **Vasorin (4G7): sc-517034**, our highly recommended monoclonal alternative to Vasorin (H-167).