

# Vasorin (C-12): sc-47564

## 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. TGF $\beta$  and atherosclerosis: so far, so good for the protective cytokine hypothesis. *Arterioscler. Thromb. Vasc. Biol.* 24: 399-404.
2. Ikeda, Y., et al. 2004. Vasorin, a TGF $\beta$ -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. TGF $\beta$  signal transduction in angiogenesis and vascular disorders. *Chest* 128: 585-590.
4. 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 TGF $\beta$ 1 in the vascular system. *Cardiovasc. Pathol.* 14: 28-36.
6. Ishisaki, A. and Matsuno, H. 2006. Novel ideas of gene therapy for atherosclerosis: modulation of cellular signal transduction of TGF $\beta$  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 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-47564 P, (100  $\mu$ g 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.

## RESEARCH USE

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

## APPLICATIONS

Vasorin (C-12) 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 (C-12) is also recommended for detection of Vasorin in additional species, including equine, canine and bovine.

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.

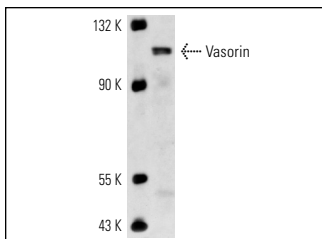
Molecular Weight of Vasorin: 110 kDa.

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 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



Vasorin (C-12): sc-47564. Western blot analysis of Vasorin expression in mouse heart tissue extract.

## PROTOCOLS

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