

Vasorin (K-13): sc-47566

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) β and attenuates TGF β signaling *in vitro*. Down-regulation 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 β 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 β -binding protein expressed in vascular smooth muscle cells, modulates the arterial response to injury *in vivo*. *Proc. Nat. Acad. Sci. USA* 101: 10732-10737.
3. Bertolino, P., et al. 2005. TGF β 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 β 1 in the vascular system. *Cardiovasc. Pathol.* 14: 28-36.
6. Ishisaki, A. and Matsuno, H. 2006. Novel ideas of gene therapy for atherosclerosis: no transduction of TGF β 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 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Vasorin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-47566 P, (100 μ 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.

PROTOCOLS

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

APPLICATIONS

Vasorin (K-13) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

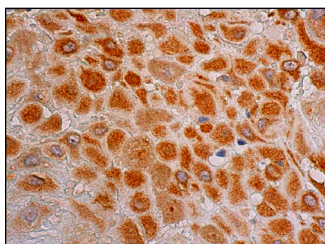
Suitable for use as control antibody for Vasorin siRNA (h): sc-61778, Vasorin siRNA (m): sc-61779, Vasorin shRNA Plasmid (h): sc-61778-SH, Vasorin shRNA Plasmid (m): sc-61779-SH, Vasorin shRNA (h) Lentiviral Particles: sc-61778-V and Vasorin shRNA (m) Lentiviral Particles: sc-61779-V.

Molecular Weight of Vasorin: 110 kDa.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Vasorin (K-13): sc-47566. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

RESEARCH USE

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