SANTA CRUZ BIOTECHNOLOGY, INC.

Vasorin (4G7): sc-517034

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. Transforming growth factor β and atherosclerosis: so far, so goo protective cytokine hypothesis. Arterioscler. Thromb. Vasc .Biol. 24: 399-404.
2. Ikeda, Y., et al. 2004. Vasorin, a transforming growth factor β-binding protein expressed in vascular smooth muscle cells, modulates the arterial response to injury *in vivo*. Proc. Natl. Acad. Sci. USA 10: 10732-10737.
3. Bertolino, P.,et al. 2005. Transforming growth factor-β signal transduction in angiogenesis and vascular disorders. Chest 128: 585S-590S.
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 transforming growth factor β1 in the vascular system. Cardiovasc. Pathol. 14: 28-36.
6. Ishisaki, A. et al. 2006. Novel ideas of gene therapy for atherosclerosis: mo transduction of TGF-β family. Curr. Pharm. Des.12: 877-886.

CHROMOSOMAL LOCATION

Genetic locus: VASN (human) mapping to 16p13.3.

SOURCE

Vasorin (4G7) is a mouse monoclonal antibody raised against amino acids 298-349 representing partial length Vasorin of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2a} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 for detailed protocols and support products.

APPLICATIONS

Vasorin (4G7) is recommended for detection of Vasorin of 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)] 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 shRNA Plasmid (h): sc-61778-SH and Vasorin shRNA (h) Lentiviral Particles: sc-61778-V.

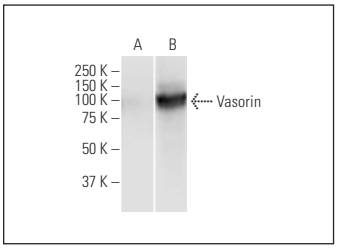
Molecular Weight of Vasorin: 110 kDa.

Positive Controls: Vasorin transfected 293T whole cell lysate.

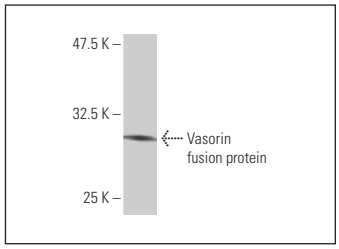
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



Vasorin (4G7): sc-517034. Western blot analysis of Vasorin expression in non-transfected (**A**) and Vasorin transfected (**B**) 293T whole cell lysates.



Vasorin (4G7): sc-517034. Western blot analysis of human recombinant Vasorin fusion protein.

SELECT PRODUCT CITATIONS

1. Mun, S., et al. 2022. Transcriptome profile of membrane and extracellular matrix components in ligament-fibroblastic progenitors and cementoblasts differentiated from human periodontal ligament cells. Genes 13: 659.
2. Farzamikia, N., et al. 2024. Podocyte-specific proteins in urinary extracellular vesicles of patients with IgA nephropathy: Vasorin and ceruloplasmin. Bioimpacts 14: 29981.

RESEARCH USE

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