

# Vasohibin-2 (N-14): sc-138719

## BACKGROUND

Angiogenesis is regulated by the balance of several different pro-angiogenic stimulators, such as vascular endothelial growth factor (VEGF) and a diverse group of endogenous inhibitors that are extrinsic to endothelial cells. Vasohibin-2, also known as VASH2, is a 355 amino acid protein belonging to the vasohibin family. Expressed in various embryonic organs, Vasohibin-2 can be detected during embryonic weeks six through twelve and is found in vessels of 20-week embryonic organs as well as in endothelial cells of neonatal large vessels. Induced by VEGF, Vasohibin-2 is an angiogenesis inhibitor and interferes with the proliferation, migration and network formation by endothelial cells. Vasohibin-2 exists as five isoforms and is encoded by a gene located on human chromosome 1, which houses over 3,000 genes and is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome.

## REFERENCES

1. Kerbel, R.S. 2004. Vasohibin: the feedback on a new inhibitor of angiogenesis. *J. Clin. Invest.* 114: 884-886.
2. Watanabe, K., et al. 2004. Vasohibin as an endothelium-derived negative feedback regulator of angiogenesis. *J. Clin. Invest.* 114: 898-907.
3. Shimizu, K., et al. 2005. Gene regulation of a novel angiogenesis inhibitor, vasohibin, in endothelial cells. *Biochem. Biophys. Res. Commun.* 327: 700-706.
4. Katoh, Y., et al. 2006. Comparative integromics on angiopoietin family members. *Int. J. Mol. Med.* 17: 1145-1149.
5. Sato, Y. 2006. A novel angiogenesis inhibitor vasohibin. *Seikagaku* 78: 763-767.
6. Shen, J., et al. 2006. Vasohibin is upregulated by VEGF in the retina and suppresses VEGF receptor 2 and retinal neovascularization. *FASEB J.* 20: 723-725.

## CHROMOSOMAL LOCATION

Genetic locus: VASH2 (human) mapping to 1q32.3; Vash2 (mouse) mapping to 1 H6.

## SOURCE

Vasohibin-2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Vasohibin-2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-138719 P, (100 µg 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.

## APPLICATIONS

Vasohibin-2 (N-14) is recommended for detection of Vasohibin-2 isoforms 1, 4 and 5 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member Vasohibin-1 or Vasohibin-2 isoforms 2 or 3.

Vasohibin-2 (N-14) is also recommended for detection of Vasohibin-2 isoforms 1, 4 and 5 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Vasohibin-2 siRNA (h): sc-78558, Vasohibin-2 siRNA (m): sc-155093, Vasohibin-2 shRNA Plasmid (h): sc-78558-SH, Vasohibin-2 shRNA Plasmid (m): sc-155093-SH, Vasohibin-2 shRNA (h) Lentiviral Particles: sc-78558-V and Vasohibin-2 shRNA (m) Lentiviral Particles: sc-155093-V.

Molecular Weight of Vasohibin-2: 40 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.