

# HOOK3 (N-20): sc-49983

## BACKGROUND

Microtubules mediate the spatial organization of diverse membrane-trafficking systems. The HOOK proteins, HOOK1, HOOK2 and HOOK3, comprise a family of cytosolic coiled-coil proteins that contain conserved N-terminal domains, which attach to microtubules; and more divergent C-terminal domains, which mediate binding to organelles. HOOK3 participates in the organization of the *cis*-Golgi compartment. It exists as a homodimer, most likely mediated through its central coiled-coil domain.

## REFERENCES

1. Walenta, J.H., Didier, A.J., Liu, X. and Kramer, H. 2001. The Golgi-associated HOOK3 protein is a member of a novel family of microtubule-binding proteins. *J. Cell Biol.* 152: 923-934.
2. Shotland, Y., Kramer, H. and Groisman, E.A. 2003. The *Salmonella* SpiC protein targets the mammalian HOOK3 protein function to alter cellular trafficking. *Mol. Microbiol.* 49: 1565-1576.
3. Kaiser, F., Kaufmann, S.H. and Zerrahn, J. 2004. IIGP, a member of the IFN inducible and microbial defense mediating 47 kDa GTPase family, interacts with the microtubule binding protein HOOK3. *J. Cell Sci.* 117: 1747-1756.

## CHROMOSOMAL LOCATION

Genetic locus: HOOK3 (human) mapping to 8p11.21; Hook3 (mouse) mapping to 8 A2.

## SOURCE

HOOK3 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HOOK3 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-49983 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HOOK3 (N-20) is recommended for detection of HOOK3 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).

HOOK3 (N-20) is also recommended for detection of HOOK3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HOOK3 siRNA (h): sc-60800, HOOK3 siRNA (m): sc-60801, HOOK3 shRNA Plasmid (h): sc-60800-SH, HOOK3 shRNA Plasmid (m): sc-60801-SH, HOOK3 shRNA (h) Lentiviral Particles: sc-60800-V and HOOK3 shRNA (m) Lentiviral Particles: sc-60801-V.

Molecular Weight of HOOK3: 83 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.

## 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.

## PROTOCOLS

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