

HOOK3 (C-10): sc-398924

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.

CHROMOSOMAL LOCATION

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

SOURCE

HOOK3 (C-10) is a mouse monoclonal antibody raised against amino acids 202-253 mapping within an internal region of HOOK3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HOOK3 (C-10) is available conjugated to agarose (sc-398924 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398924 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398924 PE), fluorescein (sc-398924 FITC), Alexa Fluor® 488 (sc-398924 AF488), Alexa Fluor® 546 (sc-398924 AF546), Alexa Fluor® 594 (sc-398924 AF594) or Alexa Fluor® 647 (sc-398924 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398924 AF680) or Alexa Fluor® 790 (sc-398924 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

HOOK3 (C-10) is recommended for detection of HOOK3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

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.

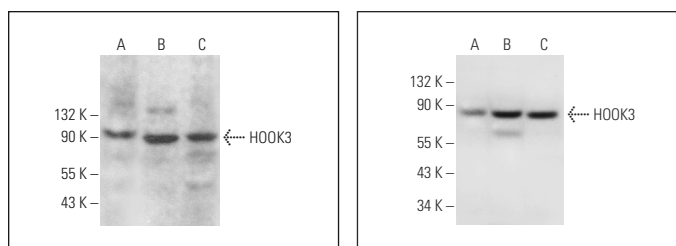
Molecular Weight of HOOK3: 83 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or RT-4 whole cell lysate: sc-364257.

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HOOK3 (C-10): sc-398924. Western blot analysis of HOOK3 expression in Hep G2 (A) and EOC 20 (B) whole cell lysates and rat brain tissue extract (C).

HOOK3 (C-10): sc-398924. Western blot analysis of HOOK3 expression in HeLa (A), Hep G2 (B) and RT-4 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Devadas, K., et al. 2016. Identification of host micro RNAs that differentiate HIV-1 and HIV-2 infection using genome expression profiling techniques. *Viruses* 8: 121.
- Dharan, A., et al. 2017. Bicaudal D2 facilitates the cytoplasmic trafficking and nuclear import of HIV-1 genomes during infection. *Proc. Natl. Acad. Sci. USA* 114: E10707-E10716.
- Dwivedi, D., et al. 2019. The dynein adaptor HOOK2 plays essential roles in mitotic progression and cytokinesis. *J. Cell Biol.* 218: 871-894.
- Fellows, A.D., et al. 2020. IGF1R regulates retrograde axonal transport of signalling endosomes in motor neurons. *EMBO Rep.* 21: e49129.

RESEARCH USE

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

PROTOCOLS

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