STOP (H-8): sc-137036

BACKGROUND

Microtubules in the cytoplasm of mammalian cells usually depolarize rapidly when exposed to cold temperature or to assembly-inhibiting drugs. Some cell types, however, contain sub-populations of microtubules called “cold-stable microtubules” that resist these depolymerizing conditions. This stabilization is due mainly to polymer association with a 952 amino acid neuronal protein designated STOP (stable tubule only polypeptide). The central region of STOP contains five tandem repeats of 46 amino acids. STOP also contains a SH3-binding motif near its N-terminus. It is present in the cell body and throughout the axon. The STOP protein action can be extreme, inducing resistance at temperatures as low as -80° C.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: MAP6 (human) mapping to 11q13.5; Map6 (mouse) mapping to 7 E2.

SOURCE

STOP (H-8) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of STOP of mouse origin.

PRODUCT

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. STOP (H-8) is available conjugated to agarose (sc-137036 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137036 HRP), 200 µg/ml, for WB, IHCIP and ELISA; to either phycocerythrin (sc-137036 PE), fluorescein (sc-137036 FITC), Alexa Fluor® 488 (sc-137036 AF488), Alexa Fluor® 546 (sc-137036 AF546), Alexa Fluor® 594 (sc-137036 AF594) or Alexa Fluor® 647 (sc-137036 AF647), 200 µg/ml, for WB (RGB), IF, IHCIP and FCM; and to either Alexa Fluor® 680 (sc-137036 AF680) or Alexa Fluor® 790 (sc-137036 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

STOP (H-8) is recommended for detection of STOP 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), 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).

Recommended for use as a control antibody for STOP siRNA (h): sc-63359, STOP siRNA (m): sc-63360, STOP shRNA Plasmid (h): sc-63359-SH, STOP shRNA Plasmid (m): sc-63360-SH, STOP shRNA (h) Lentiviral Particles: sc-63359-V and STOP shRNA (m) Lentiviral Particles: sc-63360-V.

Molecular Weight of STOP: 145 kDa.

Positive Controls: mouse brain extract: sc-2253 or rat brain extract: sc-2392.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG 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-IgG HRP: sc-516140 or m-IgG HRP PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

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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.

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.