STOP (175): sc-53513

**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, Mtap6 (mouse) mapping to 7 E2.

**SOURCE**

STOP (175) is a mouse monoclonal antibody raised against STOP purified from brain microtubules of rat 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 (175) is available conjugated to agarose (sc-53513 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53513 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53513 PE), fluorescein (sc-53513 FITC), Alexa Fluor® 488 (sc-53513 AF488), Alexa Fluor® 546 (sc-53513 AF546), Alexa Fluor® 594 (sc-53513 AF594) or Alexa Fluor® 647 (sc-53513 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53513 AF680) or Alexa Fluor® 790 (sc-53513 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**

STOP (175) is recommended for detection of STOP of mouse, rat and 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)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as 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, rat brain extract: sc-2392 or rat hippocampus tissue extract.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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