SANTA CRUZ BIOTECHNOLOGY, INC.

MAP-6D1 (S-15): sc-100033



BACKGROUND

MAP-6D1 (MAP6 domain-containing protein 1, STOP-like protein 21) is a 199 amino acid mammalian neuronal protein belonging to the STOP family. Found primarily as a part of the Golgi apparatus membrane, MAP-6D1 interacts with calmodulin and localizes to microtubules in the cytoskeleton. Calmodulin is involved in the genetic pathway that has a key role in efficient mitosis. This process is believed to be mediated and enhanced by the palmitoylation of cysteine residues near the N-terminus. Palmitoylation helps increase the hydrophobicity of proteins and enhances their membrane association. Palmitoylation also has a significant role in the subcellular trafficking of proteins between membrane compartments, as well as in modulating protein-protein interactions. These processes indicate that MAP-6D1 is highly involved with Golgi and microtubule stabilizing activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MAP6D1 (human) mapping to 3q27.1; Map6d1 (mouse) mapping to 16 A3.

SOURCE

MAP-6D1 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAP-6D1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-100033 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAP-6D1 (S-15) is recommended for detection of MAP-6D1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other MAP family members.

MAP-6D1 (S-15) is also recommended for detection of MAP-6D1 in additional species, including bovine.

Suitable for use as control antibody for MAP-6D1 siRNA (h): sc-78086, MAP-6D1 siRNA (m): sc-149253, MAP-6D1 shRNA Plasmid (h): sc-78086-SH, MAP-6D1 shRNA Plasmid (m): sc-149253-SH, MAP-6D1 shRNA (h) Lentiviral Particles: sc-78086-V and MAP-6D1 shRNA (m) Lentiviral Particles: sc-149253-V.

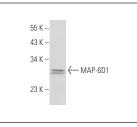
Molecular Weight of MAP-6D1: 21 kDa.

Positive Controls: rat brain extract: sc-2392.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



MAP-6D1 (S-15): sc-100033. Western blot analysis of MAP-6D1 expression in rat brain tissue extract.

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.