CNPase (G-6): sc-166063

BACKGROUND

2',3'-cyclic nucleotide-3'-phosphodiesterase (CNPase) is a membrane-bound enzyme that can link tubulin to membranes and may regulate cytoplasmic microtubule distribution. CNPase acts as a microtubule-associated protein by promoting microtubule assembly; this activity resides in the C-terminus of the enzyme. CNPase is firmly associated with tubulin from brain tissue and thyroid cells and can be found at high concentrations in central nervous system myelin and in the outer segments of photoreceptors in the retina. Acute lead intoxication leads to disturbances in CNPase activity and the morphology of myelin.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: CNP (human) mapping to 17q21.2; Cnp (mouse) mapping to 11 D.

SOURCE

CNPase (G-6) is a mouse monoclonal antibody raised against amino acids 121-420 mapping at the C-terminus of CNPase of mouse origin.

PRODUCT

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CNPase (G-6) is recommended for detection of CNPase isoforms 1 and 2 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), immunochemistry (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).

Suitable for use as control antibody for CNPase siRNA (h): sc-44377, CNPase siRNA (m): sc-40398, CNPase shRNA Plasmid (h): sc-44377-SH, CNPase shRNA Plasmid (m): sc-40398-SH, CNPase siRNA (h) Lentiviral Particles: sc-44377-V and CNPase shRNA (m) Lentiviral Particles: sc-40398-V.

Molecular Weight of CNPase: 46 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-384187, U-87 MG cell lysate: sc-2411 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

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

1) Western Blotting: use m-IgGx BP-HRP: sc-516102 or m-IgGx 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-IgGx BP-FITC: sc-516140 or m-IgGx BP-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-IgGx BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

CNPase (G-6): sc-166063. Western blot analysis of CNPase expression in HeLa (A), U-87 MG (B), EC-jh1 (C), EOC 20 (D) and H19-7/IGF-RI (E) whole cell lysates.

SELECT PRODUCT CITATIONS


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.