



CNPase (m2): 293T Lysate: sc-125150

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

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2. Vogel, U., et al. 1988. Molecular structure, localization and possible functions of the myelin-associated enzyme 2',3'-cyclic nucleotide-3'-phospho-diesterase. *J. Neurochem.* 50: 1667-1677.
3. Dabrowska-Bouta, B., et al. 2000. Acute lead intoxication *in vivo* affects myelin membrane morphology and CNPase activity. *Exp. Toxicol. Pathol.* 52: 257-263.
4. Bifulco, M., et al. 2002. 2',3'-cyclic nucleotide-3'-phosphodiesterase: a membrane-bound, microtubule-associated protein and membrane anchor for tubulin. *Proc. Natl. Acad. Sci. USA* 99: 1807-1812.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 123830. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: *Cnp1* (mouse) mapping to 11 D.

PRODUCT

CNPase (m2): 293T Lysate represents a lysate of mouse CNPase transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CNPase (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CNPase antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.