

CNP antibody

Catalog No: #38166

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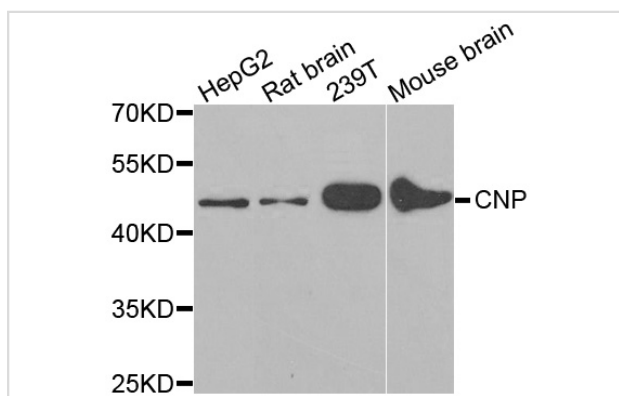
Description

Product Name	CNP antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total CNP antibody.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human CNP.
Target Name	CNP
Other Names	CNP; CNPase; CNP1
Accession No.	Swiss-Prot#: P09543NCBI Gene ID: 1267
SDS-PAGE MW	48kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: □1:500 - 1:2000

Images



Western blot analysis of extracts of various cell lines, using CNP antibody.

Background

CNPase (2', 3'B—cyclic nucleotide 3'-phosphodiesterase) catalyzes the in vitro hydrolysis of 2'B—, 3'B—cyclic nucleotides to produce 2'B—nucleotides. The in vivo molecular function and native substrate of this nucleotide phosphodiesterase remains under investigation (1). High CNPase expression is seen in oligodendrocytes and Schwann cells as CNPase accounts for roughly 4% of the total myelin protein in the central nervous system (2). CNPase binds to tubulin heterodimers and plays a role in tubulin polymerization, and oligodendrocyte process outgrowth (3).

Typical myelination is seen in CNPase knock-out mice, but they suffer severe neurodegeneration from axonal loss and oligodendrocytes display abnormal paranodal loop structure prior to axonal degeneration. Paranodal loops typically contact the axolemma in axon-glia signaling; neurodegeneration in CNPase knock-out mice is a secondary consequence of impaired cell-cell communication (4).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.