

Product datasheet for **TA332390**

CNPase (CNP) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB 1:500 - 1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CNP
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	421
Gene Name:	2',3'-cyclic nucleotide 3' phosphodiesterase
Database Link:	NP_149124 Entrez Gene 12799 Mouse Entrez Gene 25275 Rat Entrez Gene 1267 Human P09543



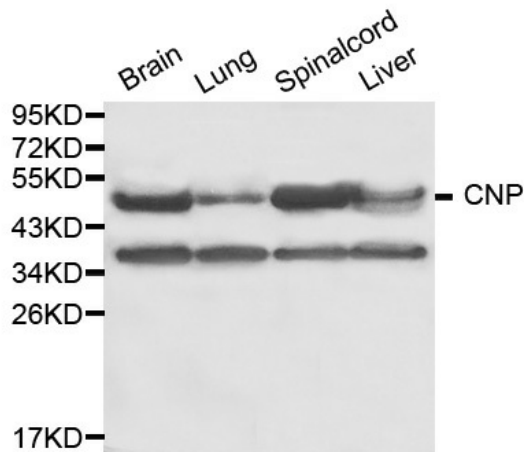
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Background:

CNPase (2', 3'-cyclic nucleotide 3'-phosphodiesterase) catalyzes the in vitro hydrolysis of 2', 3'-cyclic nucleotides to produce 2'-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).

Synonyms:

CNP1

Product images:

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