

Basic Information

Product Name	Anti-CNPase/CNP Antibody	
Gene Name	CNP	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CNPase/CNP recombinant protein (Position: M1-I421).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	48 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

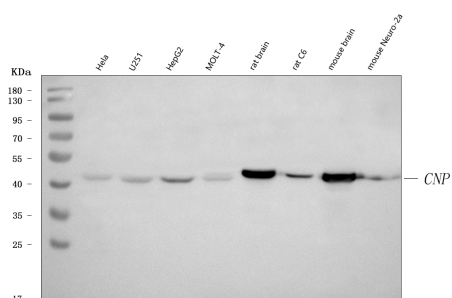
Background Information

2',3'-Cyclic-nucleotide 3'-phosphodiesterase, also known as CNPase, is an enzyme that in humans is encoded by the CNP gene. And this gene is mapped to 17q21.2. CNPase is named for its ability to catalyze the phosphodiester hydrolysis of 2',3'-cyclic nucleotides to 2'-nucleotides. CNPase is thought to play a critical role in the events leading up to myelination. Additionally, CNPase has been demonstrated to inhibit the replication of HIV-1 and other primate lentiviruses by binding the retroviral Gag protein and inhibiting the genesis of nascent viral particles.

Reference

Anti-CNPase/CNP Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of CNPase/CNP using anti-CNPase/CNP antibody (A01017-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human U251 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human MOLT-4 whole cell lysates,

Lane 5: rat brain tissue lysates,

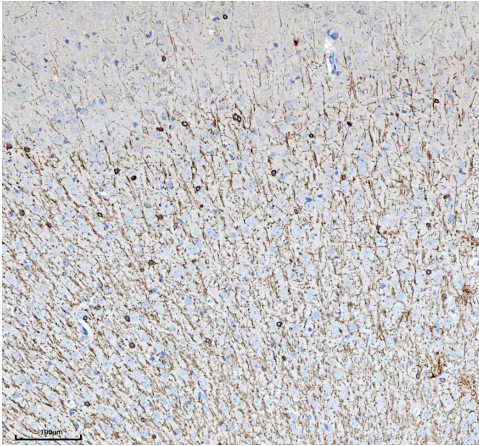
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse Neuro-2a whole cell lysates.

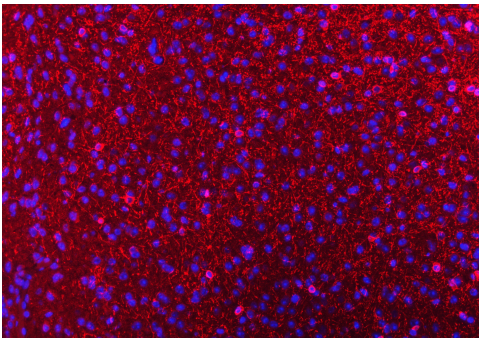
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-CNPase/CNP antigen affinity purified polyclonal antibody (A01017-4) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CNPase/CNP at approximately 48 kDa. The expected band size for CNPase/CNP is at 48 kDa.

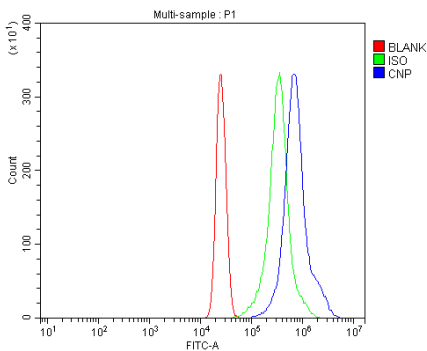


IHC analysis of CNPase/CNP using anti-CNPase/CNP antibody (A01017-4).

CNPase/CNP was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-CNPase/CNP Antibody (A01017-4) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti-CNP antibody (A01017-4). detected in paraffin-embedded section of mouse brain tissue. The tissue section were stained using the Fluoro550-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog # BA1135) and counterstained with DAPI (blue).



Flow Cytometry analysis of U937 cells using anti-CNPase/CNP antibody (A01017-4).

Overlay histogram showing U937 cells stained with A01017-4 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CNPase/CNP Antibody (A01017-4) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.