

## CNP Conjugated Antibody

Catalog No: #C38166



Package Size: #C38166-AF350 100ul #C38166-AF405 100ul #C38166-AF488 100ul  
 #C38166-AF555 100ul #C38166-AF594 100ul #C38166-AF647 100ul  
 #C38166-AF680 100ul #C38166-AF750 100ul #C38166-Biotin 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
 Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	CNP Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total CNP antibody.
Immunogen Description	Recombinant protein of human CNP.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	CNP ; CNPase; CNP1
Accession No.	Swiss-Prot#:P09543NCBI Gene ID:1267
Uniprot	P09543
GeneID	1267;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	48
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## 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).

Note: This product is for in vitro research use only