

Anti-CNPase Picoband Antibody
Catalog # ABO10134

Specification

Anti-CNPase Picoband Antibody - Product Information

Application	WB
Primary Accession	P09543
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for 2',3'-cyclic-nucleotide 3'-phosphodiesterase(CNP) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CNPase Picoband Antibody - Additional Information

Gene ID 1267

Other Names

2', 3'-cyclic-nucleotide 3'-phosphodiesterase, CNP, CNPase, 3.1.4.37, CNP

Calculated MW

47579 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Membrane; Lipid-anchor. Melanosome. Firmly bound to membrane structures of brain white matter. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Protein Name

2',3'-cyclic-nucleotide 3'-phosphodiesterase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human CNPase (142-178aa QYQVVLVEPKTAWRLDCAQLKEKNQWQLSADDLKKLK), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-CNPase Picoband Antibody - Protein Information

Name CNP ([HGNC:2158](#))

Function

Catalyzes the formation of 2'-nucleotide products from 2',3'- cyclic substrates (By similarity). May participate in RNA metabolism in the myelinating cell, CNP is the third most abundant protein in central nervous system myelin (By similarity).

Cellular Location

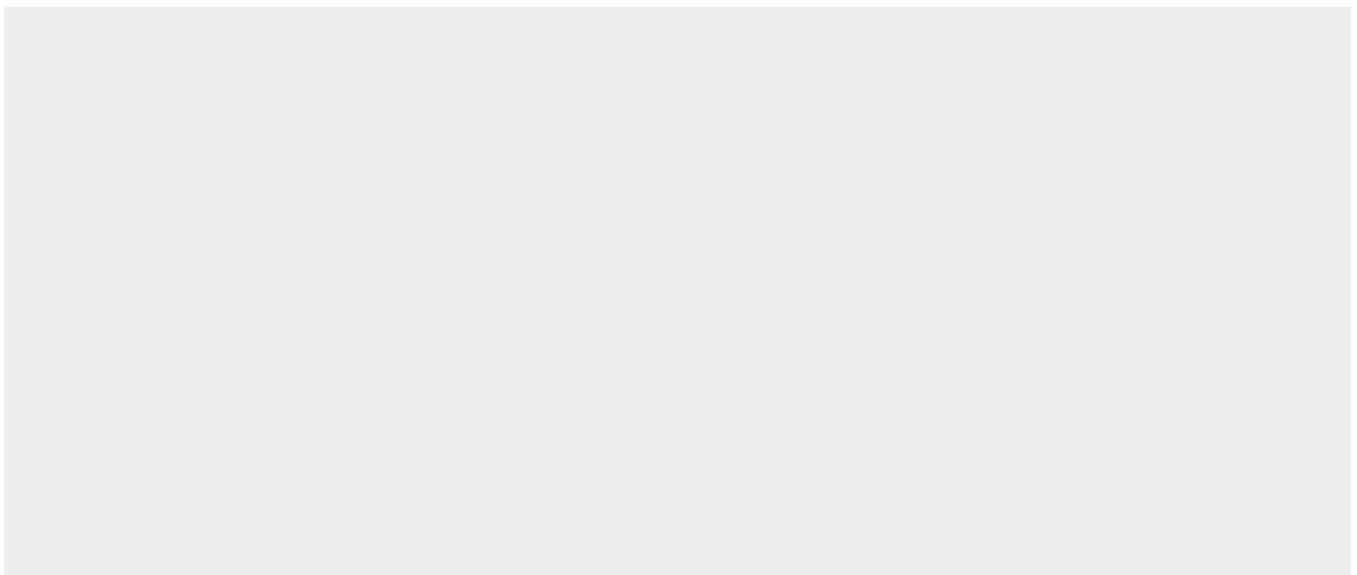
Membrane {ECO:0000250|UniProtKB:P16330}; Lipid- anchor {ECO:0000250|UniProtKB:P16330}. Melanosome. Note=Firmly bound to membrane structures of brain white matter. {ECO:0000250|UniProtKB:P16330}

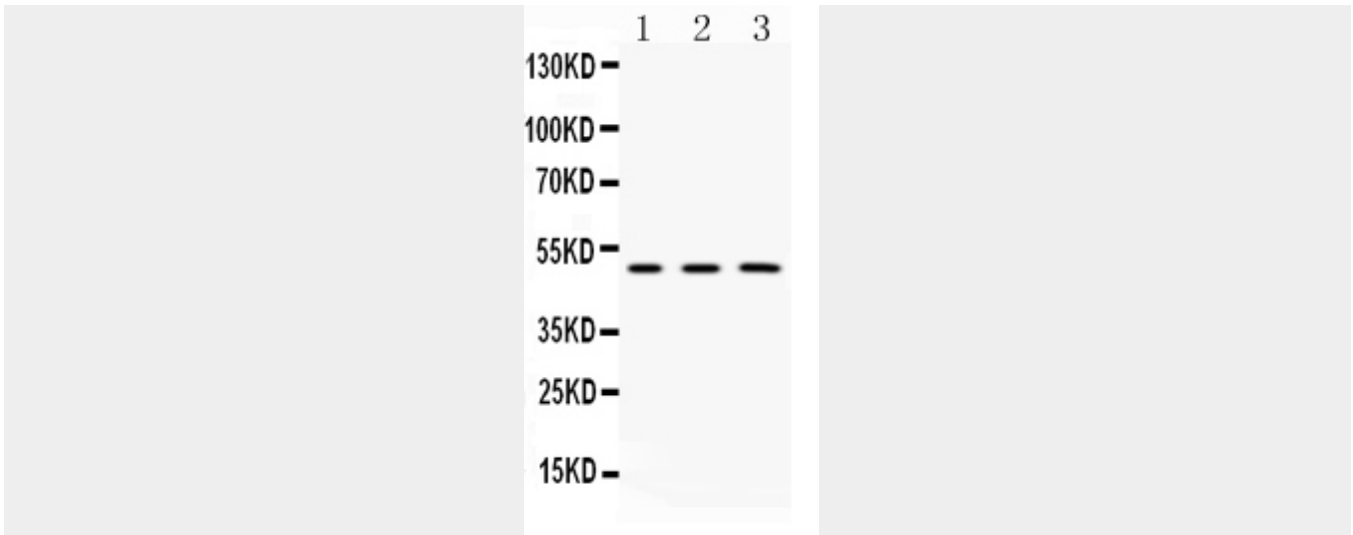
Anti-CNPase Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CNPase Picoband Antibody - Images





Western blot analysis of CNPase expression in rat brain extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). CNPase at 47KD was detected using rabbit anti-CNPase Antigen Affinity purified polyclonal antibody (Catalog # ABO10134) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-CNPase Picoband Antibody - Background

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.