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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 r˚Constitution, 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 Cytomety
- Cell Culture

Anti-CNPase Picoband Antibody - Images

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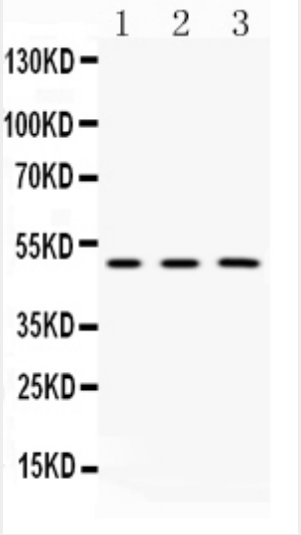

Western blot analysis of CNPase expression in rat brain extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). CNPase at 47KD was detected using rabbit anti-CNPase Antigen Affinity purified polyclonal antibody (Catalog # ABO10134) at 0.5 Î¼g/mL. The blot was developed using 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.