

BPNT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16536b

Specification

BPNT1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>095861</u>
Other Accession	<u>NP_006076.4</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33392
Antigen Region	277-305

BPNT1 Antibody (C-term) - Additional Information

Gene ID 10380

Other Names 3'(2'), 5'-bisphosphate nucleotidase 1, Bisphosphate 3'-nucleotidase 1, PAP-inositol 1, 4-phosphatase, PIP, BPNT1

Target/Specificity

This BPNT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-305 amino acids from the C-terminal region of human BPNT1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions BPNT1 Antibody (C-term) is for research

BPNT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BPNT1 Antibody (C-term) - Protein Information

Name BPNT1



Function Phosphatase that converts 3'(2')-phosphoadenosine 5'- phosphate (PAP) to AMP and inositol 1,4-bisphosphate (Ins(1,4)P2) to inositol 4-phosphate (PubMed:<u>10675562</u>). Is also able to hydrolyze adenosine 3'-phosphate 5'-phosphosulfate (PAPS) to adenosine 5'- phosphosulfate (APS) (By similarity). Probably prevents the toxic accumulation of PAP, a compound which inhibits a variety of proteins, including PAPS-utilizing enzymes such as sulfotransferases, and RNA processing enzymes. Could also play a role in inositol recycling and phosphoinositide metabolism. Is not active on 3'-AMP, inositol-1- phosphate and inositol-1,4,5-triphosphate (PubMed:<u>10675562</u>).

Tissue Location

Highly expressed in kidney, liver, pancreas and heart. Detected at lower levels in brain, placenta, lung and skeletal muscle.

BPNT1 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BPNT1 Antibody (C-term) - Images



BPNT1 Antibody (C-term) (Cat. #AP16536b) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the BPNT1 antibody detected the BPNT1 protein (arrow).

BPNT1 Antibody (C-term) - Background

BPNT1, also called bisphosphate 3-prime-nucleotidase, or BPntase, is a member of a magnesium-dependent phosphomonoesterase family. Lithium, a major drug used to treat manic depression, acts as an uncompetitive inhibitor of BPntase. The predicted human protein is 92% identical to mouse BPntase. BPntase's physiologic role in nucleotide metabolism may be regulated by inositol signaling pathways. The inhibition of human BPntase may account for lithium-induced nephrotoxicity.



BPNT1 Antibody (C-term) - References

Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) : Spiegelberg, B.D., et al. J. Biol. Chem. 274(19):13619-13628(1999)