```
BPNT1 Antibody (C-term)
Affinity Purified Rabbit Polyclona| Antibody (Pab)
Catalog # AP16536b
```


## Specification

BPNT1 Antibody (C-term) - Product Information

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Application
Primary Accession
WB,E
Other Accession
095861
Reactivity
NP 006076.4
Human
Host
Clonality
Rabbit
Isotype
Polyclonal
Calculated MW
Rabbit IgG
Antigen Region
33392
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

## 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 $2-8^{\circ} \mathrm{C}$ for up to 2 weeks. For long term storage store at $-20^{\circ} \mathrm{C}$ in small aliquots to prevent freeze-thaw cycles.

## Precautions

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 $3^{\prime}\left(2^{\prime}\right)$-phosphoadenosine $5^{\prime}$ - phosphate (PAP) to AMP and
inositol 1,4-bisphosphate (Ins(1,4)P2) to inositol 4-phosphate (PubMed:10675562). 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:10675562).

## 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.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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)

