

**BPNT1 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant BPNT1.****Catalog # AT1310a****Specification**

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**BPNT1 Antibody (monoclonal) (M01) - Product Information**

Application	IF, WB, IHC, E
Primary Accession	<a href="#">O95861</a>
Other Accession	<a href="#">NM_006085</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	33392

**BPNT1 Antibody (monoclonal) (M01) - 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**

BPNT1 (NP\_006076, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

BPNT1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

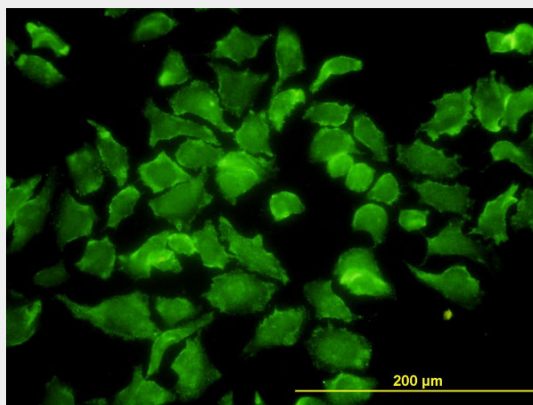
**BPNT1 Antibody (monoclonal) (M01) - Protocols**

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

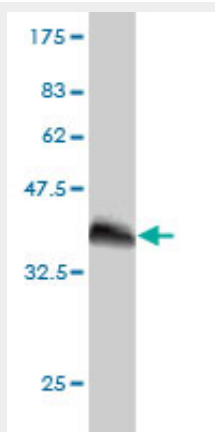
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

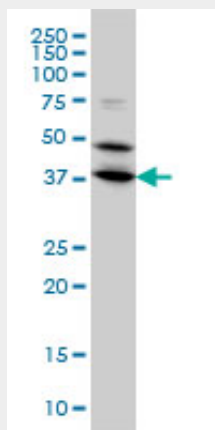
### BPNT1 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to BPNT1 on HeLa cell. [antibody concentration 10 ug/ml]

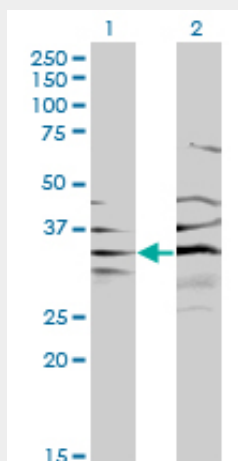


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



BPNT1 monoclonal antibody (M01), clone 2E1 Western Blot analysis of BPNT1 expression in HeLa

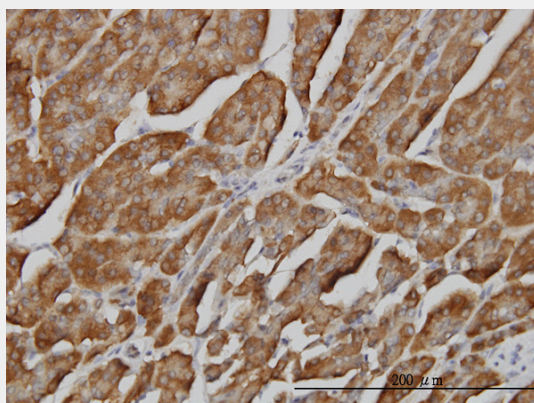
( Cat # AT1310a )



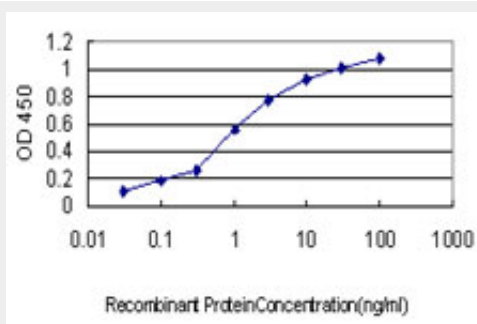
Western Blot analysis of BPNT1 expression in transfected 293T cell line by BPNT1 monoclonal antibody (M01), clone 2E1.

Lane 1: BPNT1 transfected lysate(28.1 KDa).

Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to BPNT1 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged BPNT1 is approximately 0.03ng/ml as a capture antibody.

### BPNT1 Antibody (monoclonal) (M01) - 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 (monoclonal) (M01) - References**

Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334. Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932. Cloning and characterization of a mammalian lithium-sensitive bisphosphate 3'-nucleotidase inhibited by inositol 1,4-bisphosphate. Spiegelberg BD, et al. J Biol Chem, 1999 May 7. PMID 10224133.