

BPNT1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant BPNT1.

Catalog # AT1310a

Product Information

Application	WB, IHC, IF, E
Primary Accession	O95861
Other Accession	NM_006085
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	20
Calculated MW	33392

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 IHC~~1:100~500 IF~~1:50~200 E~~N/A
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.

Background

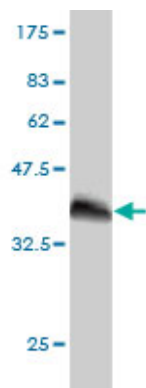
BPNT1, also called bisphosphate 3-prime-nucleotidase, or BPntase, is a member of a magnesium-dependent phosphomonoesterase family. Lithium, a major drug used to treat manic depression, acts as an uncompetitive inhibitor of BPntase. The predicted human protein is 92% identical to mouse BPntase. BPntase's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

References

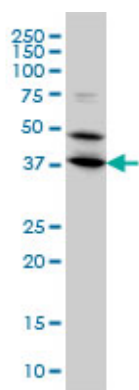
Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous

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.

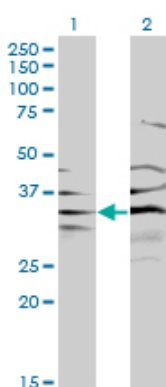
Images



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

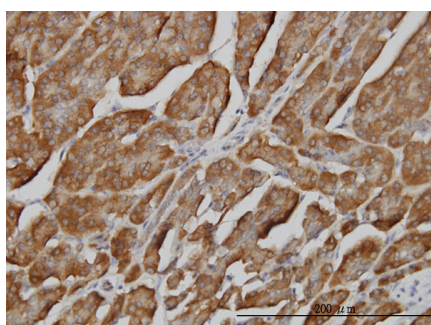


BPNT1 monoclonal antibody (M01), clone 2E1 Western Blot analysis of BPNT1 expression in HeLa (Cat # AT1310a)

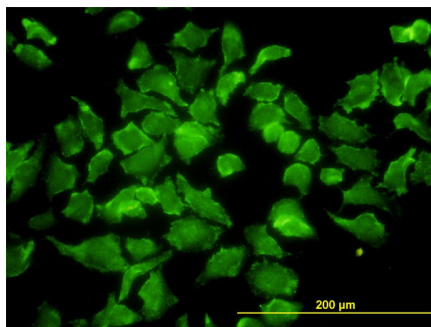


Western Blot analysis of BPNT1 expression in transfected 293T cell line by BPNT1 monoclonal antibody (M01), clone 2E1.

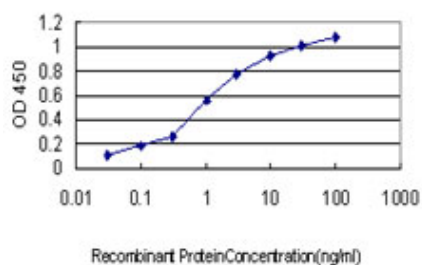
Lane 1: BPNT1 transfected lysate(28.1 KDa).
Lane 2: Non-transfected lysate.



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



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.