

Product datasheet for **RG216622**

BPNT1 (NM_006085) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BPNT1 (NM_006085) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BPNT1
Synonyms:	HEL20; PIP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216622 representing NM_006085 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCCAGTAACACTGTGTTGATGCGGTTGGTAGCCTCCGCATATTCTATTGCTCAAAGGCAGGAA
TGATAGTCAGACGTGTTATTGCTGAAGGAGACCTGGGTATTGTGGAGAAGACCTGTGCAACAGACCTGCA
GACCAAAGCTGACCGATTGGCACAGATGAGCATATGTTCTTCATTGGCCCGAAATCCCCAAACTCACA
ATTATAGGGGAAGAGGATCTGCCTTCTGAGGAAGTGGATCAAGAGCTGATTGAAGACAGTCAGTGGGAAG
AAATACTGAAGCAACCATGCCATCGCAGTACAGTGTCTATAAAGAAGAAGATCTCGTGGTCTGGGTTGA
TCCTCTGGATGGAACCAAGGAATATACCGAAGGTCTTCTTGACAATGTAACAGTTCTATTGGAATTGCT
TATGAAGGAAAAGCCATAGCAGGAGTTATTAACAGCCATATTACAACACTGAGGCAGGACCAGATGCTG
TGTTGGGGAGGACAATCTGGGGAGTTTTAGGTTTTAGGCGCCTTTGGGTTTCAGCTGAAAGAAGTCCCTGC
TGGGAAACACATTATCACAACACTCGATCCCATAGCAACAAGTTGGTTACTGACTGTGTTGCTGCATG
AACCCCGATGCTGTGCTGCGAGTAGGAGGAGCAGGAAATAAGATTATTCAGCTGATTGAAGGCAAAGCCT
CTGCTTATGTATTTGCAAGTCTGGTTGTAAGAAGTGGGATACTGTGCTCCAGAAGTTATTTTACATGC
TGTGGGAGGCAAGTTAACCGATATCCATGGGAATGTTCTTCAGTACCACAAGGATGTGAAGCATATGAAC
TCTGCAGGAGTCTGGCCACACTGAGGAATTATGACTACTATGCAAGCCGAGTCCAGAATCTATTA
ATGCACCTGTTCTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG216622 representing NM_006085
 Red=Cloning site Green=Tags(s)

MASNTVLMRLVASAYSIAQKAGMIVRRVIAEGDLGIVEKTCATDLQTKADRLAQMSICSSLARKFPKLT
 IIGEDLPSEVDQELIEDSQWEEILKQPCPSQYSAIKEEDLVVWVDPLDGTKEYTEGLLDNVTVLGIA
 YEGKAIAGVINQPYNYEAGPDAVLGRTIWGVLGLGAFGFQLKEVPAGKHIITTTTRSHSNKLVTDCAAM
 NPDAVLRVGGAGNKIIQLIEGKASAYVFASPGCKKWDTCAPEVILHAVGGKLTDIHGNVLQYHKDVKHMN
 SAGVLATLRNYDYASRPESIKNALVP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006085

ORF Size: 924 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_006085.6](#)

RefSeq Size: 2461 bp

RefSeq ORF: 927 bp

Locus ID: 10380

UniProt ID: [O95861](#)

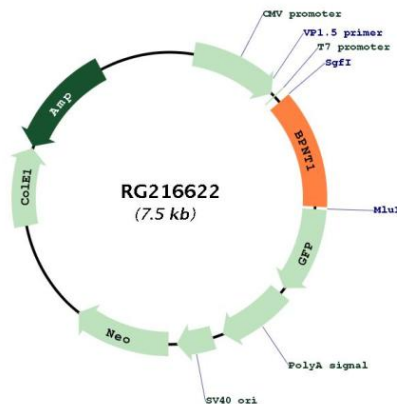
Cytogenetics: 1q41

Domains: inositol_P

Protein Pathways: Sulfur metabolism

Gene Summary: 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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG216622