

## Product datasheet for **RG236955**

### **BPNT1 (NM\_001286149) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BPNT1 (NM_001286149) 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:	>RG236955 representing NM_001286149. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAGCATATGTTCTTCATTGGCCCGAAATCCCCAACTCACAATTATAGGGGAAGAGGATCTGCCT
TCTGAGGAAGTGGATCAAGAGCTGATTGAAGACAGTCAGTGGGAAGAAATACTGAAGCAACCATGCCCA
TCGCAGTACAGTGCTATTAAGAAGAAGATCTCGTGGTCTGGGTTGATCCTCTGGATGGAACCAAGGAA
TATACCGAAGGTCTTCTTGACAATGTAAACAGTTCTTATTGGAATTGCTTATGAAGAAAAGCCATAGCA
GGAGTTATTAACCAGCCATATTACAATATGAGGCAGGACCAGATGCTGTGTTGGGAGGACAATCTGG
GGAGTTTTAGGTTTAGGGCCTTTGGGTTTCAGCTGAAAGAAGTCCCTGCTGGGAAACACATTATCACA
ACTACTCGATCCCATAGCAACAAGTTGGTTACTGACTGTGTTGCTGCTATGAACCCCGATGCTGTGCTG
CGAGTAGGAGGAGCAGGAAATAAGATTATTCAGCTGATTGAAGGCAAAGCCTCTGCTTATGTATTTGCA
AGTCTGGTTGTAAAGTGGGATACTTGTGCTCCAGAAGTTATTTACATGCTGTGGGAGGCAAGTTA
ACCGATATCCATGGGAATGTTCTTCAGTACCACAAGGATGTGAAGCATATGAACTCTGCAGGAGTCTCTG
GCCACACTGAGGAATTATGACTACTATGCAAGCCGAGTCCAGAATCTATAAAAATGCACCTTGTTCCT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



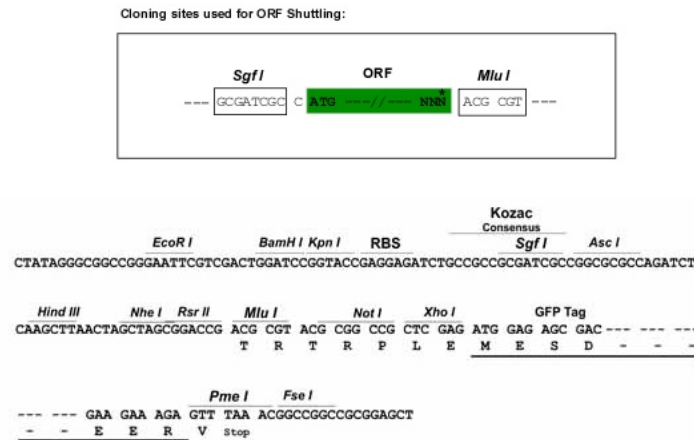
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG236955  
 Blue=ORF Red=Cloning site Green=Tag(s)

MSICSSLARKFPKLTIIIGEDLPSEEVDQELIEDSQWEEILKQPCPSQYSAIKEEDLVVWVDPLDGTKE  
 YTEGLLDNVTVLIGIAYEGKAIAGVINQPYNYEAGPDAVLGRTIWVGLGLGAFGFQLKEVPAGKHIIIT  
 TTRSHSNKLVTDCAAMNPDAVLRVGGAGNKIIQLIEGKASAYVFASPGCKKWDCAPEVILHAVGGKL  
 TDIHGNVLQYHKDVKHMNSAGVLATLRNYDYASRVPEISIKNALVP  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001286149

**ORF Size:** 759 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).

**RefSeq:** [NM\\_001286149.2](#)

**RefSeq Size:** 2337 bp

**RefSeq ORF:** 762 bp

Locus ID: 10380

UniProt ID: [O95861](#)

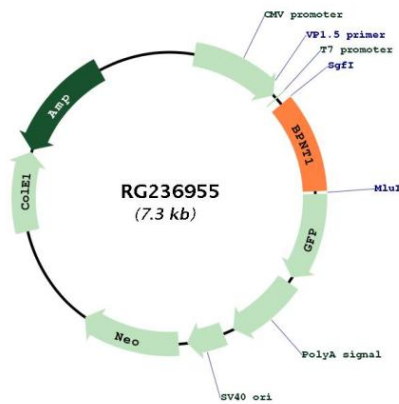
Cytogenetics: 1q41

Protein Pathways: Sulfur metabolism

MW: 28 kDa

**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 RG236955