

## Product datasheet for **RG209393**

### Pyrophosphatase 1 (PPA1) (NM\_021129) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pyrophosphatase 1 (PPA1) (NM_021129) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pyrophosphatase 1
Synonyms:	HEL-S-66p; IOPPP; PP; PP1; SID6-8061
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209393 representing NM_021129 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGGCTTCAGCACCGAGGAGCGCGCCGCCCTTCTCCCTGGAGTACCGAGTCTTCTCAAAAATG  
AGAAAGGACAATATATCTCCATTTTCATGATTTCCAATTTATGCAGATAAGGATGTGTTTCACATGGT  
AGTTGAAGTACCACGCTGGTCTAATGCAAAAATGGAGATTGCTACAAAGGACCCTTTAAACCTATTTAA  
CAAGATGTGAAAAAGGAAAACCTCGCTATGTTGCGAATTTGTTCCCGTATAAAGGATATATCTGGAAC  
ATGGTGCCATCCCTCAGACTTGGGAAGACCCAGGGCACAATGATAAACATACTGGCTGTTGTGGTGACAA  
TGACCAATTGATGTGTGTGAAATTGGAAGCAAGGTATGTGCAAGAGGTGAAATAATTGGCGTGAAAGTT  
CTAGGCATATTGGCTATGATTGACGAAGGGGAAACCGACTGGAAGTCATTGCCATTAATGTGGATGATC  
CTGATGCAGCCAATTATAATGATATCAATGATGTCAAACGGCTGAAACCTGGCTACTTAGAAGCTACTGT  
GGACTGGTTTAGAAGGTATAAGTTTCTGATGGAAAACCGAAAATGAGTTTGCCTTTAATGCAGAAATTT  
AAAGATAAGGACTTTGCCATTGATATTATAAAGCACTCATGACCATTGGAAAGCATTAGTGACTAAGA  
AAACGAATGGAAGGAATCAGTTGCATGAATACAACCTTTGTCTGAGAGCCCTTCAAGTGTGATCCTGA  
TGCTGCCAGACCATTGTGGATGCTTACCACCACCCTGTGAATCTGCCTGCACAGTACCAACAGACGTG  
GATAAGTGGTTCCATCACCAGAAAAAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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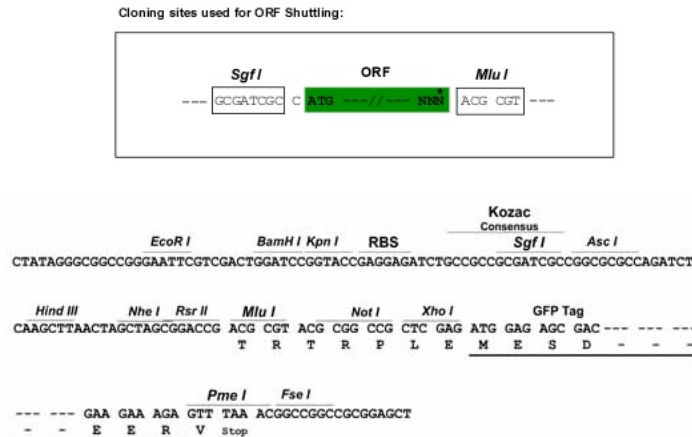
**Protein Sequence:** >RG209393 representing NM\_021129  
 Red=Cloning site Green=Tags(s)

MSGFSTEERAAPFSLEYRVFLKNEKGQYISPFHDIPIYADKDVFMVVEVPRWSNAKMEIATKDPLNPIK  
 QDVKKGLRYVANLFPYKGYIWNYGAIPTWEDPGHNDKHTGCCGNDPIDVCEIGSKVCARGEIIGVKV  
 LGILAMIDEGETDVKVIAINVDDPDAANYNDINDVKRLKPGYLEATVDWFRRYKVPDGKPENEFANAEF  
 KDKDFAIDIIKSTHDHWKALVTKKTNGKGISCMNTTLESSEPFKCDPDAARAIVDALPPPCESACTVPTDV  
 DKWFHHQKN

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021129

**ORF Size:** 867 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\\_021129.4](#)

**RefSeq Size:** 1316 bp

**RefSeq ORF:** 870 bp

**Locus ID:** 5464

**UniProt ID:** [Q15181](#)

**Cytogenetics:** 10q22.1

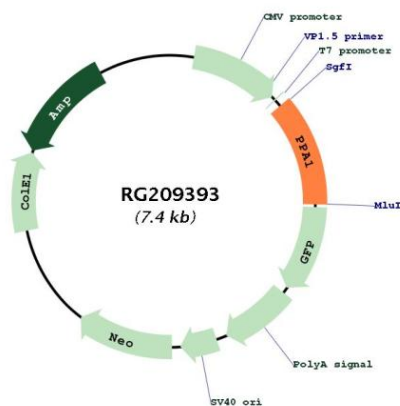
**Domains:** Pyrophosphatase

**Protein Families:** ES Cell Differentiation/IPS

**Protein Pathways:** Oxidative phosphorylation

**Gene Summary:** The protein encoded by this gene is a member of the inorganic pyrophosphatase (PPase) family. PPases catalyze the hydrolysis of pyrophosphate to inorganic phosphate, which is important for the phosphate metabolism of cells. Studies of a similar protein in bovine suggested a cytoplasmic localization of this enzyme. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG209393