

Product datasheet for **RG221785**

PPA2 (NM_176867) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PPA2 (NM_176867) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PPA2
Synonyms: HSPC124; SCFAI; SCFI; SID6-306
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221785 representing NM_176867
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCGCGTGTGCGGCTGCTGCGCACGGGTGCCCCAGCCGCTGCGTGCCTGCGGTTGGGGACCACTG
 CAGGGACCGGTCGCGCCGTGCTATGGCCCTGTACCACACTGAGGAGCGCGGCCAGCCCTGCTCGCAGAA
 TTACCGCCTCTTTAATATTGATGATGTTAAGAAGTTCAAACCGGTTACCTGGAAGCTACTCTTAAT
 TGGTTTAGATTATAAGGTACCAGATGAAAAACCAGAAACCAGTTTGCTTTAATGGAGAATTCAAAA
 ACAAGGCTTTTGCTCTTGAAGTTATTAATCCACTCATCAATGTTGAAAGCATTGCTTATGAAGAAGTG
 TAATGGAGGAGCTATAAATGCACAAACGTGCAGATATCTGATAGCCCTTCCGTTGCACTCAAGAGGAA
 GCAAGATCATTAGTTGAATCGGTATCATCTTCACCAAATAAAGAAAGTAATGAAGAAGAGCAAGTGTGGC
 ACTTCCTTGGCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221785 representing NM_176867
 Red=Cloning site Green=Tags(s)

MSALLRLLRTGAPAAACLRLGTSAGTGSRRAMALYHTEERGQPCSQNYRFFNIDDVKKFKPGYLEATLN
 WFRLYKVPDGKPENQFAFNGEFKNKFALEVIKSTHQCWKALLMKKCNGGAINCTNVQISDSPFRCTQEE
 ARSLVESVSSPNKESNEEEQVWHFLGK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

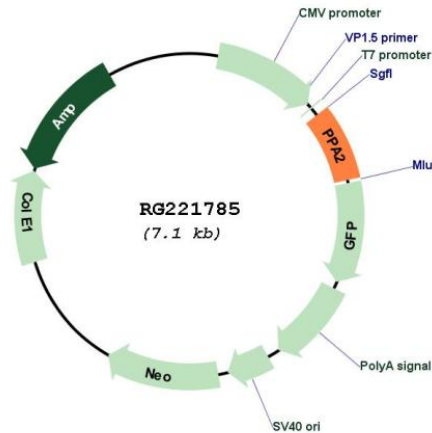


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Cloning Scheme:



Plasmid Map:



ACCN: NM_176867

ORF Size: 504 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:	<ol style="list-style-type: none">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:	<u>NM_176867.3</u> , <u>NP_789843.2</u>
RefSeq Size:	1184 bp
RefSeq ORF:	507 bp
Locus ID:	27068
UniProt ID:	<u>Q9H2U2</u>
Cytogenetics:	4q24
Protein Pathways:	Oxidative phosphorylation
Gene Summary:	The protein encoded by this gene is localized to the mitochondrion, is highly similar to members of the inorganic pyrophosphatase (PPase) family, and contains the signature sequence essential for the catalytic activity of PPase. PPases catalyze the hydrolysis of pyrophosphate to inorganic phosphate, which is important for the phosphate metabolism of cells. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]