

Product datasheet for RC208860

PPA2 (NM_006903) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PPA2 (NM_006903) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PPA2 |
| Synonyms: | HSPC124; SCFAI; SCFI; SID6-306 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC208860 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGCGTGTGCGGCTGCTGCGCACGGGTGCCCCAGCCGCTGCGTGCCTGCGGTTGGGGACCACTG
CAGGGACCGGTCGCGCCGTGCTATGGCCCTGTACCACACTGAGGAGCGCGGCCAGCCCTGCTCGCAGAA
TTACCGCCTCTTCTTTAAGAATGTAAGTGGTCACTACATTTCCCCTTTCATGATTTCTCTGAAGGTG
AACTCTAAAGAGGAAAAATGGCATTCTATGAAGAAAGCACGAAATGATGAATATGAGAATCTGTTAATA
TGATTGTAGAAATACCTCGGTGGACAAATGCTAAAATGGAGATTGCCACCAAGGACCAATGAATCCCAT
TAAACAATATGTAAGGATGAAAAGCTACGCTATGTGGCGAATATCTTCCCTTACAAGGGTTATATATGG
AATTATGGTACCCTCCCTCAGATTCTTTCTGTGGAGAAGTTATTCATGTGAAGATCCTTGGAAATTTGG
CTCTTATTGATGAAGGTGAAACAGATTGAAAATTAATTGCTATCAATGCGAATGATCCTGAAGCCTCAAA
GTTTCATGATATTGATGATGTTAAGAAGTTCAAACCGGTTACCTGGAAGCTACTCTTAATTGGTTTGA
TTATATAAGGTACCAGATGAAAACAGAAAACCAAGTTTGCTTTTAAATGGAGAATCAAAAAACAAGGCTT
TTGCTCTGAAGTTATTAATCCACTCATCAATGTTGAAAGCATTGCTTATGAAGAAGTGAATGGAGG
AGCTATAAATGCACAAACGTGCAGATATCTGATAGCCCTTTCCGTTGCACTCAAGAGGAAGCAAGATCA
TTAGTTGAATCGGTATCATCTTACCAAATAAAGAAAGTAATGAAGAAGCAAGTGTGGCACTTCTTTG
GCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208860 protein sequence
Red=Cloning site Green=Tags(s)

MSALLRLLRTGAPAAACLRLGTSAGTGSRRAMALYHTEERGQPCSQNYRLFFKNVTGHYISPFHDIPLKV
 NSKEENGIPMKKARNDEYENLFNMIVEIPRWTKAKMEIATKEPMNPIKQYVKDGKLRVYVANIIFYKGYIW
 NYGTLPQILSCGEVIHVKILGILALIDEGETDWKLIAINANDPEASKFHDIDDKVKKFKPGYLEATLNWFR
 LYKVPDGKPENQFAFNGEFKNKAFLEVIKSTHQCWKALLMKKCNCGAINCTNVQISDSPFRCTQEEARS
 LVESVSSSPNKESNEEEQVWHFLGK

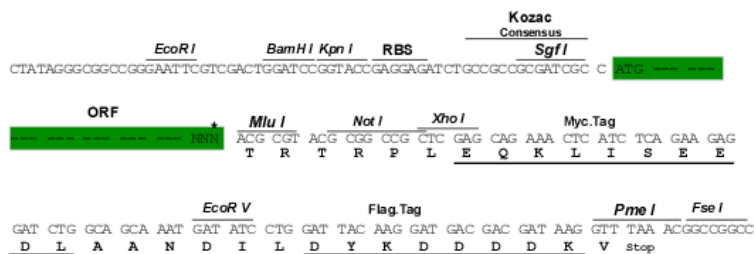
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6550_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006903

ORF Size: 915 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_006903.4](#), [NP_008834.3](#)

RefSeq Size: 1595 bp

RefSeq ORF: 918 bp

Locus ID: 27068

UniProt ID: [Q9H2U2](#)

Cytogenetics: 4q24

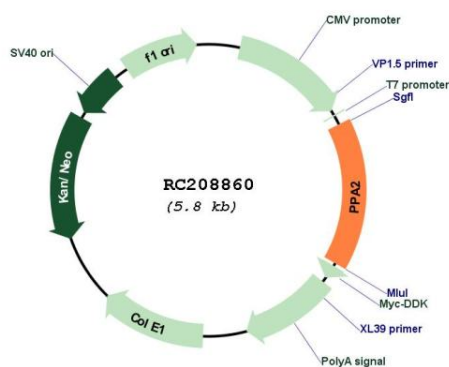
Domains: Pyrophosphatase

Protein Pathways: Oxidative phosphorylation

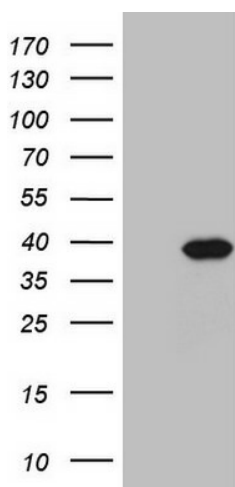
MW: 34.7 kDa

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]

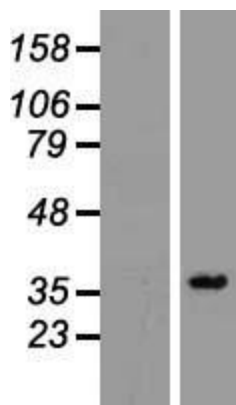
Product images:



Circular map for RC208860



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PPA2 (Cat# RC208860, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PPA2 (Cat# [TA808324])(1:2000). Positive lysates [LY416344] (100ug) and [LC416344] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416344]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208860 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).