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Product datasheet for RC223311

PPA2 (NM_176869) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPA2 (NM_176869) 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:

>RC223311 representing NM_176869
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCGCGCTGCTGCGGCTGCTGCGCACGGGTGCCCCAGCCGCTGCGTGCCTGCGGTTGGGGACCAGTG
CAGGGACCGGGTCGCGCCGTGCTATGGCCCTGTACCACACTGAGGAGCGCGGCCAGCCCTGCTCGCAGAA
TTACCGCCTCTTCTTTAAGAATGTAACTGGTCACTACATTTCCCCCTTTCATGATATTCCTCTGAAGGTG
AACTCTAAAGAGGAAAATGGCATTCCTATGAAGAAAGCACGAAATGATGAATATGAGAATCTGTTTAATA
TGATTGTAGAAATACCTCGGTGGACAAATGCTAAAATGGAGATTGCCACCAAGGAGCCAATGAATCCCAT
TAAACAATATGTAAAGGATGGAAAGCTACGCTATGTGGCGAATATCTTCCCTTACAAGGGTTATATATGG
AATTATGGTACCCTCCCTCAGACTTGGGAAGATCCCCATGAAAAAGATAAGAGCACGAACTGCTTTGGAG
ATAATGATCCTATTGATGTTTGCGAAATAGGCTCAAAGATTCTTTCTTGTGGAGAAGTTATTCATGTGAA
GATCCTTGGAATTTTGGCTCTTATTGATGAAGGTGAAACAGATTGGAAATTAATTGCTATCAATGCGAAT
GATCCTGAAGCCTCAAAGTTTCATGATATTGATGATGTTAAGAAGTTCAAACCGGGTTACCTGGAAGCTA
CTCTTAATTGGTTTAGATTATATAAGGTACCAGATGGAAAACCAGAAAACCAGTTTGCTTTTAATGGAGA
ATTCAAAAACAAGGCTTTTGCTCTTGAAGTTATTAAATCCACTCATCAATGTTGGAAAGCATTGCTTATG
AAGAACTGTAATGGAGGAGCTATAAATTGCACAAACGTGCAGATATCTGATAGCCCTTTCCGTTGCACTC
AAGAGGAAGCAAGATCATTAGTTGAATCGGTATCATCTTCACCAAATAAAGAAAGTAATGAAGAAGAGCA
AGTGTGGCACTTCCTTGGCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC223311 representing NM_176869
Red=Cloning site Green=Tags(s)

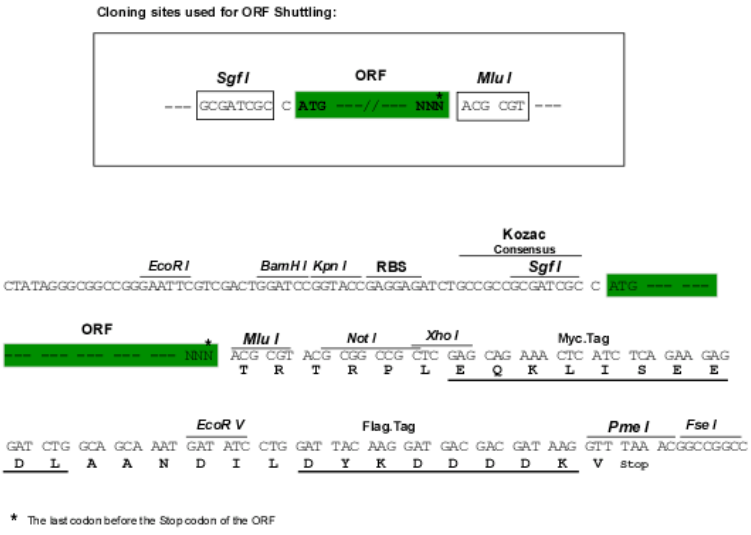
MSALLRLLRTGAPAAACLRLGTSAGTGSRRAMALYHTEERGQPCSQNYRLFFKNVTGHYISPFHDIPLKV
NSKEENGIPMKKARNDEYENLFNMIVEIPRWTNAKMEIATKEPMNPIKQYVKDGKLRYVANIFPYKGYIW
NYGTLPQTWEDPHEKDKSTNCFGDNDPIDVCEIGSKILSCGEVIHVKILGILALIDEGETDWKLIAINAN
DPEASKFHDIDDVKKFKPGYLEATLNWFRLYKVPDGKPENQFAFNGEFKNKAFALEVIKSTHQCWKALLM
KNCNGGAINCTNVQISDSPFRCTQEEARSLVESVSSSPNKESNEEEQVWHFLGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3950_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_176869

ORF Size: 1002 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_176869.3

RefSeq Size: 1682 bp

RefSeq ORF: 1005 bp

Locus ID: 27068

UniProt ID: Q9H2U2

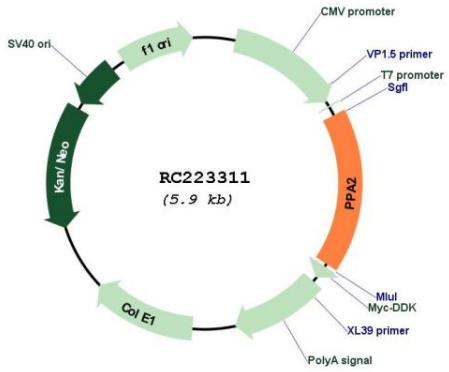
Cytogenetics: 4q24

Protein Pathways: Oxidative phosphorylation

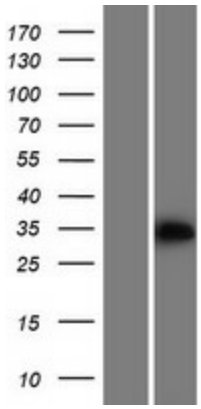
MW: 34.8 kDa

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]

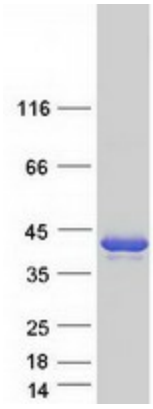
Product images:



Circular map for RC223311



Western blot validation of overexpression lysate (Cat# [LY406117]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223311 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPA2 protein (Cat# [TP323311]). The protein was produced from HEK293T cells transfected with PPA2 cDNA clone (Cat# RC223311) using MegaTran 2.0 (Cat# [TT210002]).