

Product datasheet for **RC207008**

ATP5PD (NM_001003785) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP5PD (NM_001003785) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP5PD
Synonyms: APT5H; ATP5H; ATPQ
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC207008 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTGGGGCAAACTTGCTCTAAAAACCATTGACTGGGTAGCTTTTGCAGAGATCATACCCAGAACC
AAAAGGCCATTGCTAGTTCCTGAAATCCTGGAATGAGACCCACCTCCAGGTTGGCTGCTTTACCTGA
GAATCCACCAGCTATCGACTGGGCTTACTACAAGGCAATGTGGCCAAGGCTGGCTTGGTGGATGACTTT
GAGAAGAAGGTGAAATCTTGCTGAGTGGGTGTCTCTCAAAGGCCAGGATTGTAGAATATGAGAAG
AGATGGAGAAGATGAAGAACTTAATTCATTTGATCAGATGACCATTGAGGACTTGAATGAAGCTTTCCC
AGAAACCAAATTAGACAAGAAAAAGTATCCCTATTGGCCTCACCAACCAATTGAGAATTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207008 protein sequence
Red=Cloning site Green=Tags(s)

MAGRKLALKTIDWVAFIEIPQNQKAIASSLSKSWNETLTSRLAALPENPPAIDWAYYKANVAKAGLVDDF
EKKVKSCAEWVLSKARIVEYEKEMEMKKNLIPFDQMTIEDLNEAFPETKLDKKNYPYWPHQPIENL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_001003785

ORF Size: 411 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_001003785.2](#)

RefSeq Size: 556 bp

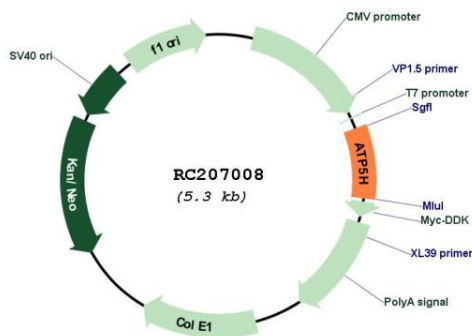
RefSeq ORF: 414 bp

Locus ID: 10476

UniProt ID: [O75947](#)
Cytogenetics: 17q25.1
Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW: 15.8 kDa

Gene Summary: Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. It is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, which comprises the proton channel. The F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the d subunit of the Fo complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. In addition, three pseudogenes are located on chromosomes 9, 12 and 15. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RC207008