

## Product datasheet for **RG207008**

### ATP5PD (NM\_001003785) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ATP5PD (NM\_001003785) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** ATP5PD  
**Synonyms:** APT5H; ATP5H; ATPQ  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG207008 representing NM\_001003785  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTGGGCGAAAACCTGCTCTAAAACCATTGACTGGGTAGCTTTTGCAGAGATCATACCCAGAACC  
 AAAAGGCCATTGCTAGTTCCTGAAATCCTGGAATGAGACCCCTCACCTCCAGGTTGGCTGCTTTACCTGA  
 GAATCCACCAGCTATCGACTGGGCTTACTACAAGGCCAATGTGGCCAAGGCTGGCTTGGTGGATGACTTT  
 GAGAAGAAGGTGAAATCTTGTGCTGAGTGGGTGTCTCTCTCAAAGGCCAGGATTGTAGAATATGAGAAG  
 AGATGGAGAAGATGAAGAACTTAATTCCATTTGATCAGATGACCATTGAGGACTTGAATGAAGCTTTCCC  
 AGAAACCAAATTAGACAAGAAAAAGTATCCCTATTGGCCTCACCAACCAATTGAGAATTTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG207008 representing NM\_001003785  
 Red=Cloning site Green=Tags(s)

MAGRKLALKTIDWVAFIEIPQNQKAIASSLKSUNETLTSRLAALPENPPAIDWAYYKANVAKAGLVDDF  
 EKKVKSCAEWVLSKARIVEYEKEMKMKNLIPFDQMTIEDLNEAFPETKLDKPKYPYWPHQPIENL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

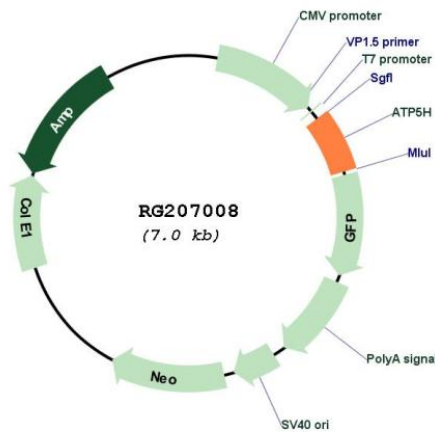


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Cloning Scheme:



Plasmid Map:



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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001003785.2</a>
<b>RefSeq Size:</b>	556 bp
<b>RefSeq ORF:</b>	414 bp
<b>Locus ID:</b>	10476
<b>UniProt ID:</b>	<a href="#">O75947</a>
<b>Cytogenetics:</b>	17q25.1
<b>Protein Pathways:</b>	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
<b>Gene Summary:</b>	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]