

Product datasheet for **RG205088**

ATP5PB (NM_001688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP5PB (NM_001688) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP5PB
Synonyms:	ATP5F1; PIG47
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205088 representing NM_001688 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTCCCGGGTGGTACTTTCCGCCGCCACAGCGGCCCTCTCTGAAGAATGCAGCCTTCCTAG
GTCCAGGGGATTGCAGGCAACAAGGACCTTTCATACAGGGCAGCCACACCTTGCCCTGTACCACCTCT
TCCTGAATACGGAGGAAAAGTTCGTTATGGACTGATCCCTGAGGAATCTCCAGTTTCTTATCCTAAA
ACTGGTGAACAGGACCCTATGTACTCGGAAGTGGCTTATCTTGTACGCTTTATCCAAAGAAATATATG
TGATTAGCGCAGAGACCTTCACTGCCCTATCAGTACTAGGTGTAATGGTCTATGGAATAAAAAATATGG
TCCTTTGTTGCAGACTTGGCTGATAAACTCAATGAGCAAAAAGTGGCCAACTAGAAGAGCGGAAGCAG
GCTTCCATCCAACACATCCAGAATGCAATTGATACGGAGAAGTCACAACAGGCACTGGTTCAGAAGCGCC
ATTACCTTTTGTATGTGCAAAGGAATAACATTGCTATGGCTTTGGAAGTTACTTACCGGGAACGACTGTA
TAGAGTATATAAGGAAGTAAAGAATCGCCTGGACTATCATATATCTGTGCAGAACATGATGCGTCGAAA
GAACAAGAACACATGATAAATGGGTGGAGAAGCACGTGGTGCAGCAAGCATCTCCACACAGCAGGAAAAG
AGACAATTGCCAAGTGCATTGCGGACCTAAAGCTGCTGGCAAAGAAGGCTCAAGCACAGCCAGTTATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205088 representing NM_001688
 Red=Cloning site Green=Tags(s)

MLSRVLSAAATAAPSLKNA AFLGPGVLQATRTFHTGQPHLVPVPPLPEYGGKVRVGLIPEEFFQFLYPK
 TGVTPGYVLGTGLILYALSKEIYVISAETFTALSVLGMVYGIKKYGPVADFADKLNEQKLAQLEEAQK
 ASIQHIQNAIDTEKSQQALVQKRHYLFDVQRNNIAMALEVYRERLYRVYKEVKNRLDYHISVQNMMRRK
 EQEHMINWVEKHVVQSI STQEQEKETIAKCIADLKLLAKKAQAQPV M

TRTRPLE - GFP Tag - V

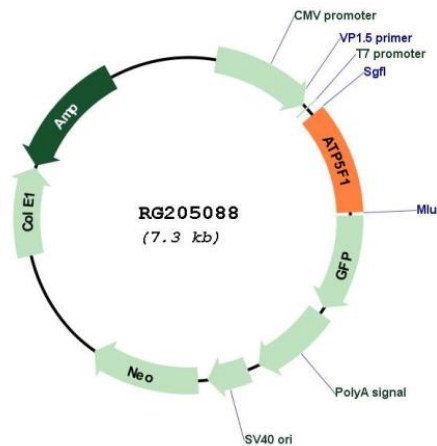
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001688

ORF Size: 768 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:	NM_001688.5
RefSeq Size:	2116 bp
RefSeq ORF:	771 bp
Locus ID:	515
UniProt ID:	P24539
Cytogenetics:	1p13.2
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the b subunit of the proton channel. [provided by RefSeq, Jul 2008]