

Product datasheet for **RG235278**

ATP7B (NM_001243182) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP7B (NM_001243182) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATP7B
Synonyms: PWD; WC1; WD; WND
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235278 representing NM_001243182
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTGAGCAGGAGACAGATCACAGCCAGAGAAGGGGCCAGTCGGAAAATCTTATCTAAGCTTTCTT
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AGCGCTGCAGCAGACGATGATGGGACAAGTGGTCTCTGCTCTGAATGGCAGGGATGAGGAGCAGTACA
TC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235278 representing NM_001243182
 Red=Cloning site Green=Tags(s)

MPEQERQITAREGASRKILSKLSLPTRAWEPAMKKSFAFDNVGYEGGLDGLGPSSQVATSTVRILGMTQ
 SCVKSIEDRISNLKGIISMKVSLLEQGSATVKYVPSVVCLQQVCHQIGDMGFEASIAEGKAASWPSRSLPA
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 SSDVSDAMTDHEMKGQTAILVAIDGVLGCMIAIADAVKQEAALAVHTLQSMGVDDVLTITGDNRKTARAI
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TRTRPLE - GFP Tag - V

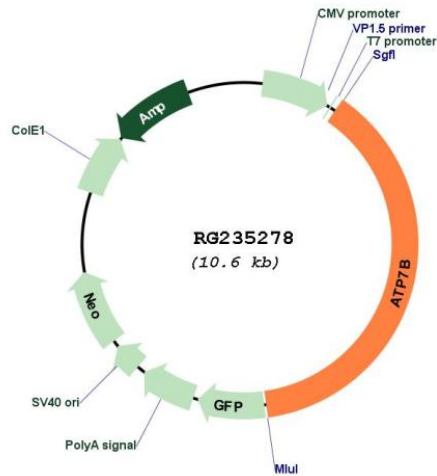
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001243182

ORF Size: 4062 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_001243182.1](#), [NP_001230111.1](#)

RefSeq Size: 6322 bp

RefSeq ORF: 4065 bp

Locus ID: 540

UniProt ID: [P35670](#)

Cytogenetics: 13q14.3

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene is a member of the P-type cation transport ATPase family and encodes a protein with several membrane-spanning domains, an ATPase consensus sequence, a hinge domain, a phosphorylation site, and at least 2 putative copper-binding sites. This protein is a monomer, and functions as a copper-transporting ATPase which exports copper out of the cells, such as the efflux of hepatic copper into the bile. Alternate transcriptional splice variants, encoding different isoforms with distinct cellular localizations, have been characterized. Mutations in this gene have been associated with Wilson disease which is characterized by copper accumulation. [provided by RefSeq, Dec 2019]