

Product datasheet for **RG203847**

ATPBD3 (CTUI) (NM_145232) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ATPBD3
Synonyms:	ATPBD3; NCS6
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG203847 representing NM_145232
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCGCCCCCGCGTGCCTCTGCCATGCTGCACGCGCCGCTCCGCCGTCCGCTCTCGGGCCAAG
CGCTGTGCGGTGCTTCTGCGCGCCTTCGAGGCCGAGGTGCTGCACACGGTGCTCGCCGGCCGCT
GCTGCCGCCCGCGCGGTGGTGGCGCTGGCGCCTCGGGCGCAAGGACTCCACGGTGCTGGCGCACGTG
AGGCGCGCGCTGGCGCCGCGCTGGCATCTCACTGCAGCTCGTGGCCGTCGATGAGGGCATCGGTGGCT
ACCGGGACGCGCGCTTGGCGCGCGTGGCGGCCAGGCGGTGCGCTGGGAGCTGCCGCTCACGGTCTGGC
CTACGAAGACCTCTTTGGGGCTGGACGATGGACGCCGTGGCCCGCAGCACAGCCGGCTCCGGCCGAGC
CGCTCCTGCTGCACCTTCTGTGAGTGCTGCGCGCCGGCGCTGGAGGAAGGGGCGCGCGTGGGAG
CCACGCACATCGTGACAGGTCAACGCCGACGACATGGCGGAGACCGTCTCATGAATTCCTACGGG
CGACGCGGGCGGCTGGCCGGGGCGGGGCTGGGCTCTCCGCGCAGGGGGCGCCCTGCGCGCTGC
CGCCCGCTGCAGTTCGCTCGCAGAAGGAGGTGGTGTGTACGCGCACTTCGCGCGCTCGACTACTTCT
CCGAGGAGTGCGTCTACGCGCCGAGGCTTCGCGGCCACGCCGGGACCTGCTCAAGCGCTGGAGGC
GGCGCGGCGTCCGCGGTGCTGGACCTCGTCACTCGCCGAGCGCTGGCGTGGCCCCGGCCGCGCG
CCCCCGCGCCCGCGCTGCTCCGCTGTGGGCGCTGGCCAGCCGCGCTCTGCCAGGCTGCGCGC
TCCTGGACGGCTGAACCGCGCGCCCGCCGCTGGCCATCGGCAAGGGCGCGGGGTCTGGACGAGGA
GGCGACGCCGGGACGCCGGGGATCCGGCCGCGCCCGCTCCAAGGCGTCCCCACCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



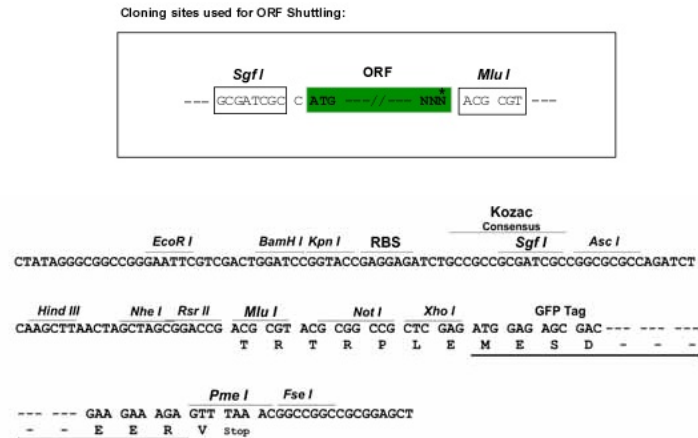
Protein Sequence: >RG203847 representing NM_145232
Red=Cloning site Green=Tags(s)

MPAPPCASCHAARAALRRPLSGQALCGACFAAFEAEVLHTVLAGRLLPPGAVVAVGASGGKSTVLAHV
RRALAPRLGISLQLVAVDEGIGGYRDAALAAVRRQAVRWELPLTVVAYEDLFGWTMDAVARSTAGSGRS
RSCCTFCGVLRRRALEEGARRVGATHIVTGHNADMAETVLMNFLRGDAGRLARGGGLGSPGEGGALPRC
RPLQFASQKEVVLVAHFRRLDYFSEECVYAPEAFRGHARDLLKRLEAARPSAVLDLVHSAERLALAPAAR
PPRPGACSRGALASRALCQACALLDGLNRGRPLAIGKRRRLDEEATPGTPGDPARPPASKAVPTF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145232

ORF Size: 1044 bp

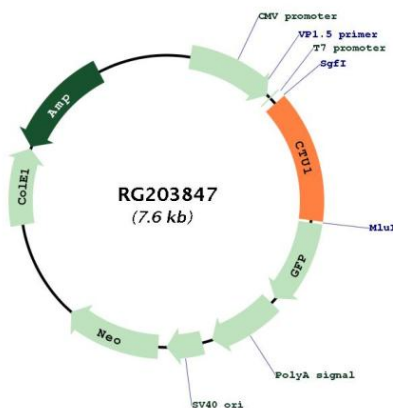
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_145232.2 , NP_660275.1
RefSeq Size:	1166 bp
RefSeq ORF:	1047 bp
Locus ID:	90353
UniProt ID:	Q7Z7A3
Cytogenetics:	19q13.41
Domains:	ATP_bind3
Gene Summary:	Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of tRNA(Lys), tRNA(Glu) and tRNA(Gln). Directly binds tRNAs and probably acts by catalyzing adenylation of tRNAs, an intermediate required for 2-thiolation. It is unclear whether it acts as a sulfurtransferase that transfers sulfur from thiocarboxylated URMI onto the uridine of tRNAs at wobble position.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG203847