

Product datasheet for **RG203536**

ATAD3B (NM_031921) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ATAD3B
Synonyms:	AAA-TOB3; TOB3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >RG203536 representing NM_031921
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGTGGCTCTTCGGCGTTAACAAAGGGCCCCAAGGGTGAAGCGCGGGGCCCGCCGCCCTTTGCCG
CCGCGCAGCCCGGGGCCGAGGGCGGCGGGGACCGCGTTTGGGAGACCGGCCGCGGCCAAGGACAAATG
GAGCAACTTCGACCCACCGGCCCTGGAGCGCGCCGCCAAGGCGGCGCGGAGCTGGAGCACTCGCGTTAC
GCCAAGGAGGCCCTGAATCTGGCGCAGATGCAGGAGCAGACGCTGCAGTTGGAGCAACAGTCCAAGCTCA
AAGATGATGAGCGCCGCTGGAGCAGCTCAAGAGCGAGCAGATCCGGCGCAGGCTGAGGAGAGGAGGA
GACCTTGAGCGAGGAGACCCGCGACACCGAGGCCAGGGCCAGTATCAAGACAAGCTGGCCCGGACGCG
TACGAGGACCAACTGAAGCAGCAGCGACTTCTCAATGAGGAGAATTTACGGAAGCAGGAGGAGTCCGTGC
AGAAGCAGGAAGCCATGCGGCGAGCCACCGTGGAGCGGGAGATGGAGCTGCGGCACAAGAATGAGATGCT
GCGAGTGGAGACCGAGGCCCGGGCGCGGCCAAGGCCGAGCGGGAGAATGCAGACATCATCCGCGAGCAG
ATCCGCCCTGAAGGCGTCCGAGCACCCTGAGACCGTCTTGGAGTCCATCAGGACGGCTGGCACCTTGTTTG
GGGAAGGATTCGTGCTTTGTGACAGACCGGGACAAAGTGACAGCCACGGTGGCTGGGCTGACGCTGCT
GGCTGTCGGGTCTACTCAGCAAGAATGCAGACGCGTCTACTGCCCCTTCTCATGAGGCTCGGCTGGG
AAGCGCTGCTAGTGAGGAGAGCTCCGACATCAGCGTGTCTGGAGGCGCTGCGGCAACCCCATCAGGTCA
GCCGCGGCTCCTCAGTCGACCCAGGACGTGCTGGAGGGTGTGTGCTTAGTCCCAGCCTGGAAGCAG
GGTGCAGCATCGCCATAGCAACCAGGAACACCAAGAAGAACCGGGGCTGTACAGGCACATCCTGCTG
TATGGGCCACCAGGACCGGGAAGACGCTGTTGCCAAGAACTCGCCCTGCATCAGGCATGGAAGTACG
CCATCATGACAGGCGGGGACGTGGCCCCATGGGCGGGGAAGGCGTGACCGCCATGCACAAGCTCTTGA
CTGGGCCAATACCAGCCGCGCGGCCCTCCTGCTTCTATGGATGAAGCAGACGCCCTTCTTCGGAAGCGA
GCCACTGAGGAGATAAGCAAGGACCTCAGAGCCACATGCAAGCCTTCTGTACCACATGGGCCAACACA
GCAACAAATTCATGCTGTGCTCTGGCCAGGACATGTGCTTGAGCAGTTGCACTGTGCCATCAACAGCCGAT
TGACGTGATGGTCCAATTCGACCTGCCGACGAGGAGGAGCGGGAGCGCTGGTGAGACTGCATTTTGAC
AACTGTGTTCTTAAGCCGGCCACAGAAGGAAAACGGCGCTGAAGCTGGCCAGTTTGACTACGGGAGGA
AGTGTCTGGAGGTGCTCGGCTGACGAGGGCATGTGGGCCGGGAGATCGCTCAGCTGGCCGTGTCTTG
GCAGGCCACGGCATATGCCTCAGGACGGGGTCTCTACTGAGGCCATGATGACGCTGTGTGCAAGAT
GCTGTCCAGCAGTACCGACAGAAGATGCGCTGGCTGAAGGCGGAGGGGCTGGGCGCGGGGTGAGCACC
CCCTATCCGAGTCCAAGGCGAGACCTCACCCTCATGAGCCTGGCCACGGGACCCCTCCTACCCTGCT
TGCCGGCCCTGACAAATTTAGGATATGCTCTGATGGGACATGGGCTGTGCCAGGGCCTCTGTCCCC
AGGATGTCTTGTGGTGGCGGTGGCCGTTCTGCCCCAGGGCACCCCTGTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203536 representing NM_031921
Red=Cloning site Green=Tags(s)

MSWSLFGVNGKPGKGEAGPPPLPPAQPGAEGGGDRGLGDRPAKDKWSNFDPDTGLERAAKAARELEHSRY
AKEALNLAQMQEQLTQLEQQSKLKEYEAAVEQLKSEQIRAQAEERRKTLSEETRQHQAQAYQDKLARQV
YEDQLKQQRLLNEENLRKQEEVSQKQEAAMRRATVEREMELRHKNEMLRVETEARAKAARENADIIREQ
IRLKASEHRQTVLESIRTAGTLFGEGFRAFTVDRDKVTATVAGLTLLAVGVYSKAKNATAVTGRFTEARLG
KPSLVRETSRITVLEALRHPIQVSRRLSRPQDVLEGVVLSPSLEARVVDIAIATRNTKKNRGLYRHILL
YGPPTGKTLFAKKLALHSGMDYAIMTGGDVAPMGREGVTAMHKLFDWANTSRRGLLLFMDEADAFLRKR
ATEEISKDLRATLLNAFLYHMGQHSNKFMLVLASNLPEQFDCAINSRIDVMVHFDLPQQEERERLVRHLFD
NCVLKPATEGKRRLKAEQFDYGRKCSSEVARLTEGMSGREIAQLAVSWQATAYASKDGLVTEAMMDACVQD
AVQQYRQKMRWLKAEQPGRGVHPLSGVQGETLTSWSLATDPSYPCLAGPCTFRICSWMGTGLCPGLSP
RMSGGGGRPFCPPGHPLL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031921

ORF Size: 1944 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

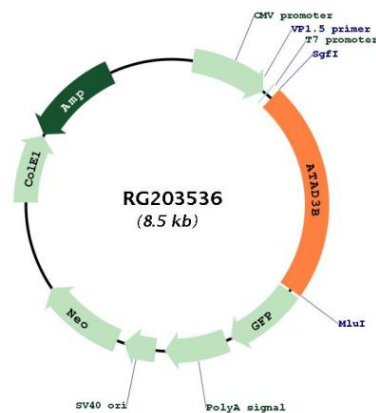
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_031921.3, NP_114127.2</u>
RefSeq Size:	2466 bp
RefSeq ORF:	1947 bp
Locus ID:	83858
UniProt ID:	<u>Q5T9A4</u>
Cytogenetics:	1p36.33
Gene Summary:	The protein encoded by this gene is localized to the mitochondrial inner membrane, where it can bind to a highly-related protein, ATAD3A. ATAD3A appears to interact with matrix nucleoid complexes, and the encoded protein negatively regulates that interaction. This gene is expressed almost exclusively in pluripotent embryonic stem cells and some cancer cells. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RG203536