

Product datasheet for **RG230314**

ATAD3A (NM_001170535) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATAD3A (NM_001170535) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATAD3A
Synonyms:	HAYOS; PHRINL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG230314 representing NM_001170535
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGTCGTGGCTCTTCGGCATTACAAGGGCCCCAAGGGTGAAGGCGGGGCCGCCGCCCTTTGCCGC
 CCGCGCAGCCCGGGCCGAGGGCGGGGACCGCGGTTGGGAGACCGCCGGCCCAAGGACAATG
 GAGCAACTTCGACCCACCGGCCTGGAGCGCGCCCAAGGCGGCGGAGCTGGAGCACTCGCGTTAT
 GCCAAGGACGCCCTGAATCTGGCACAGATGCAGGAGCAGACGCTGCAGTTGGAGCAACAGTCCAAGCTCA
 AAGAGTATGAGGCCGCGTGGAGCAGCTCAAGAGCAGCAGATCCGGGCGCAGGCTGAGGAGAGGAGGAA
 GACCTGAGCGAGGAGACCCGGCAGCACCAGGCCAGGGCCAGTATCAAGACAAGCTGGCCCGCAGCGC
 TACGAGGACCAACTGAAGCAGCAGCAACTTCTCAATGAGGAGAATTTACGGAAGCAGGAGGAGTCCGTGC
 AGAAGCAGGAAGCCATGCGGCGAGCCACCGTGGAGCGGGAGATGGAGCTGCGGCACAAGAATGAGATGCT
 GCGAGTGGAGGCCGAGGCCGGGCGCGCCCAAGGCCGAGCGGGAATGCAGACATCATCCGCGAGCAG
 ATCCGCTGAAGGCGGCCGAGCACCCTCAGACCGTCTTGGAGTCCATCAGGACGGCTGGCACCTGTTTG
 GGAAGGATTCGCTGCTTTGTGACAGACTGGGACAAAGTGACAGCCACGGTGGCTGGGCTGACGCTGCT
 GGCTGTTGGGTCTACTCAGCCAAGAATGCCACGCTTGTGCGCGCCGCTTATCGAGGCTCGGCTGGGG
 AAGCCGTCCTAGTGAGGAGACGTCCCGCATCACGGTGTGAGGCGCTGCGGCACCCCATCCAGGTCA
 GCCGGCGGCTCCTCAGTCGACCCAGGACGCGCTGGAGGGTGTGTTGCTCAGTCCCAGCCTGGAAGCAGC
 GGTGCGGACATCGCCATAGCAACAAGGAACACCAAGAAGAACCAGCAGCTGTACAGGAACATCCTGATG
 TACGGGCCACAGGACCCGGGAAGACGCTGTTTCCAAGAACTCGCCCTGCACTCAGGCATGGACTACG
 CCATCATGACAGGCGGGACGTGGCCCCATGGGCGGGGAGGCGTGACCGCCATGCACAAGCTCTTTGA
 CTGGGCCAATACCAGCCGCGCGCCTCCTGCTCTTTGTGGATGAAGCGGACGCCTTCTTCGGAAGCGA
 GCCACCGAGAAGATAAGCGAGGACCTCAGGGCCCACTGAACGCCTTCTGTACCGCACGGGCCAGCACA
 GCAACAAGTTCATGCTGCTCCTGGCCAGCAACCAACCAGAGCAGTTCGACTGGGCCATCAATGACCGCAT
 CAATGAGATGGTCCACTTCGACCTGCCAGGCGAGGAAACGGGAGCGCCTGGTGAAGATGATTTTGGAC
 AAGTATGTTCTTAAGCCGGCCACAGAAGAAAGCAGCGCCTGAAGCTGGCCAGTTTACTACGGGAGGA
 AGTGTCTCGGAGGTCGCTCGGCTGACGGAGGGCATGTGGGCGGGAGATCGCTCAGTGGCCGTGCTCTG
 GCAGGCCACGGCGTATGCCTCCGAGGACGGGTCTGACCGAGGCCATGATGGACACCCGCTGCAAGAT
 GCTGTCCAGCAGCACCAGCAGAAGATGTGCTGGCTGAAGGCGGAAGGGCCTGGGCGTGGGACGAGCCCT
 CCCCATCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG230314 representing NM_001170535
 Red=Cloning site Green=Tags(s)

MSWLFGINKGPKEGAGPPPPLPPAQPGAEGGDRGLGDRPAPKDKWSNFDPTGLERAAKAARELEHSRY
 AKDALNLAQMQLQLEQQSKLKEYEAAVEQLKSEQIRAQAEERRKTLSEETRQHQAQYQDKLARQR
 YEDQLKQQQLNEENLRKQEEESVQKQEMRRATVEREMELRHKNEMLRVEAEARAKAARENADIREQ
 IRLKAAEHRQTVLESIRTAGTLFGEGRFVTDWDKVTATVAGLTLAVGVYSAKNATLVAGRFIEARLG
 KPSLVRETSRITVLEALRHPIQVSRRLSRPQDALEGVVLSPLSLEARVRDIAIATRNTKKNRSLYRNILM
 YGPPGTGKTLFAKKLALHSGMDYAIMTGGDVAPMGREGVTAMHKLFDWANTSRRGLLLFVDEADAFLRKR
 ATEKISEDLRATLNAFLYRTGQHSNKFMLVLASNQPEQFDWAINDRINEMVHFDLPGQEERERLVRMYFD
 KYVLKPATEGKQLKLAQFDYGRKCSEVARLTEGMSGREIAQLAVSWQATAYASEDGVLTEAMMDTRVQD
 AVQQHQKMCWLKAEGPGRGDEPSPS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

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_001170535.3
RefSeq Size:	2512 bp
RefSeq ORF:	1761 bp
Locus ID:	55210
UniProt ID:	Q9NVI7
Cytogenetics:	1p36.33
Gene Summary:	This gene encodes a ubiquitously expressed mitochondrial membrane protein that contributes to mitochondrial dynamics, nucleoid organization, protein translation, cell growth, and cholesterol metabolism. This gene is a member of the ATPase family AAA-domain containing 3 gene family which, in humans, includes two other paralogs. Naturally occurring mutations in this gene are associated with distinct neurological syndromes including Harel-Yoon syndrome. High-level expression of this gene is associated with poor survival in breast cancer patients. A homozygous knockout of the orthologous gene in mice results in embryonic lethality at day 7.5 due to growth retardation and defective development of the trophoblast lineage. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2017]