

Product datasheet for **RG215062**

Atrophin 1 (ATN1) (NM_001007026) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Atrophin 1 (ATN1) (NM_001007026) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | ATN1 |
| Synonyms: | B37; CHEDDA; D12S755E; DRPLA; HRS; NOD |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG215062 representing NM_001007026 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACACGACAGAATAAAGACTCGATGTCAATGAGGAGTGGACGGAAGAAAGAGGCCCTGGGCCCC
GGGAAGAAGTGAATCGAGGGGCGGGCCCTCCCCTGGAGGGGTGACGACGTCCAGCAGTATGGCAAAGC
TGAGAAGTCCAGGCAGACAGCCAAGAAGGCCGAGTAGAGGAAGCCTCCACCCAAAGGTCAACAAGCAG
GGTCGGAGTGGAGAGATCTCAGAGAGTGAAGTGAAGGAGACCAATGCACCAAAAAAGACCAAACTGAGC
AGGAACCTCCCTCGCCACAGTCTCCCTCCGATCTGGATAGCTTGGACGGGCGGAGCCTTAATGATGATGG
CAGCAGCGACCCTAGGGATATCGACCAGGACAACCGAAGCACGTCCCCCAAGTATCTACAGCCCTGGAAGT
GTGGAGAATGACTCTGACTCATCTTCTGGCCTGTCCCAGGGCCAGCCCGCCCTACCACCCACCTCCAC
TCTTCTCCTTCCCCTCAACCGCCAGACAGCACCCCTCGACAGCCAGAGGCTAGCTTTGAACCCATCC
TTCTGTGACACCCACTGGATATCATGCTCCCATGGAGCCCCACATCTCGAATGTTCCAGGCTCCTCCT
GGGGCCCTCCCCTCACCCACAGCTCTATCCTGGGGGCACTGGTGGAGTTTGTCTGGACCCCAATGG
GTCCAAAGGGGGAGGGGCTGCCTCATCAGTGGGGGCCCTAATGGGGTAAGCAGCACCCCAACCCAC
TACTCCATTTTCAGTATCAAGCTCTGGGCTAGTGGTGTCCCCAACAAAGCCGCTACCACTCCAGTG
GGTGGTGGGAACCTACCTTCTGCTCCACCACGCAACTCCCCATGTGACACCGAACCTGCCTCCCC
CACCTGCCCTGAGACCCCTCAACAATGCATCAGCCTCTCCCCCTGGGCGCCCAACCACTACTCTGG
TCATCTGCCCTCTCCCCAGCCATGGGACAGGGTATGGGTGGACTTCTCCTGGCCAGAGAAGGGCCCA
ACTCTGGCTCCTCACCCACTCTCTGCCTCCTGCTTCTTCTTCTGCTCCAGCGCCCCCATGAGGTTTC
CTTATTATCCTTAGTAGTCTGTCAGCAGCCTCCTTCCAGTTCTTCTCCTCTTCTCTGCTCCTC
CCCCTCCAGCTTCCAGGCATTGCCAGCTACCCCACTCTTCCCTCCCCAACAAAGCCTCTCTGTC
TCCAATCAGCCCCCAAGTATACTCAGCCTTCTCCATCCCAGGCTGTGTGGAGCCAGGGTCCCCCAC
CACCTCCTCCTATGGCCGCTCTTAGCCAACAGCAATGCCATCCAGGCCCTTCCCTCCTCTACTGG
GGCCAGTCCACCGCCACCCACAGTCTCAACACATCACCATCACCACCAGCAACGCAACAGCAGCAG



[View online »](#)

Protein Sequence: >RG215062 representing NM_001007026
Red=Cloning site Green=Tags(s)

```

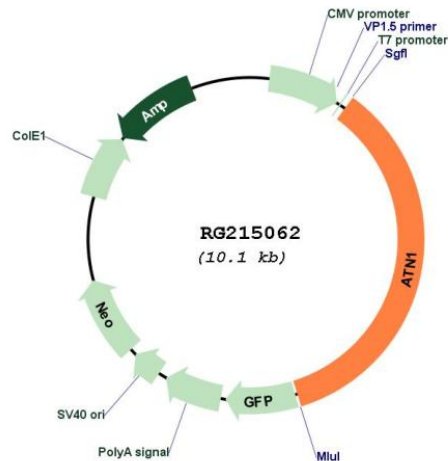
MKTRQNKDSMSMRSGRKKKEAPGPREELRSRGRASPGGVSTSSSDGKAEKSRQTAKKARVEEASTPKVVKQ
GRSEIIESESEETNAPKKTKTEQELPRPQSPDLDSLDRSLNDDGSSDPRDIDQDNRESTSPSIYSPGS
VENDSDSSSGLSQGPARYHPPPLFPPSPQPPDSTPRQPEASFEPHPSVPTPTGYHAPMEPPTS RMFQAPP
GAPPPHPQLYPGGTGGVLSGPPMGPKGGGAASSVGGPNGGKQHPPTTPI SVSSSGASGAPTKPPTTPV
GGGNLPSAPPPANFPHVTPNLPPPPALRPLNNASASPPGLGAQPLPGHLPSPHAMGQGMGLPPGPEKGP
TLAPSPHSLPPASSAPAPPMRFYSSSSSSSAASSSSSSSSASPPASQALPSYPHFPPTSLSV
SNQPPKYTQPSLPSQAVWSQGPPPPPYGRLANSNAHPGFPPTGAQSTAHPVSTHHHHHQQQQQQ
QQQQQQQQQQHHGNSGPPPPGAFPHLEGGSSHHAHPYAMPSLGSRLPYPPGPAHLPPHSQVYSYQ
AGPNGPPVSSSSNSSSTSQGSYPCSHSPSQGPQGAPYFPVPTVTSSATLSTVIATVASSPAGYKT
ASPPGPPPYGKRAPSPGAYKTATPPGYKPGSPSFRTGTPPGYRGTSPAGPGTFKPGSPTVGGPLPPA
GPSGLPSLPPPAAPASGPPLSATQIKQEPAAEYETPESVPPARSPPPPKVVDVPSHASQSARFNKHL
DRGFNSCARSDL YFVPLEGSKLAKKRADLVEKVRREAEQRAREEKERERERERERERERERELERSVK
LAQEGRAPVECPSLGPVPHRPPFEPGSAVATVPPYLGPDPALRTLSEYARPHVMSPGNRNHPFYVPLGA
YDPGLLGYNVPALYSSDPAARERERERERDLRDLKPGFEVKPSELEPLHGVPGPLDPFPRHGLALQ
PGPPGLHPFFHPSLGPLERERLALAAGPALRPDMSYAERLAAERQHAERVAALGNDPLARLQMLNVTPH
HHQHSIHSHLHLHQQDAIHAASASVHPLIDPLASGSHL TRIPYPAGTLPNLLPHPLHENEVLRHLQFA
APYRDL PASL SAPMSAAHQLQAMHAQSAELQRLALEQQQWLHAHHPLHSVPLPAQEDYYSHLKKESDKPL
    
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
Cloning Scheme:



Plasmid Map:



ACCN: NM_001007026

ORF Size: 3570 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_001007026.2](#)

RefSeq Size: 4367 bp

RefSeq ORF: 3573 bp

Locus ID: 1822

UniProt ID: [P54259](#)

Cytogenetics: 12p13.31

Protein Families: Druggable Genome

Gene Summary: Dentatorubral pallidoluysian atrophy (DRPLA) is a rare neurodegenerative disorder characterized by cerebellar ataxia, myoclonic epilepsy, choreoathetosis, and dementia. The disorder is related to the expansion from 7-35 copies to 49-93 copies of a trinucleotide repeat (CAG/CAA) within this gene. The encoded protein includes a serine repeat and a region of alternating acidic and basic amino acids, as well as the variable glutamine repeat. Alternative splicing results in two transcripts variants that encode the same protein. [provided by RefSeq, Jul 2016]