

Product datasheet for **RG216678**

Atherin (SAMD1) (NM_138352) Human Tagged ORF Clone

Product data:

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



ORF Nucleotide Sequence: >RG216678 ORF sequence, **codon optimized**.
Due to the complexity of NM_138352, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGGGCTCCCGCACTGCCACCACCCGAGACTGCCCGCGCCCAACCACCGCGGCCGAGCCTCCT
CATCTGCTGCATCCCCACATTATCAGGAATGGATCCTGGATACAATCGATTCCCTCAGATCTAGGAAAGC
CCGCCCGGACCTCGAGAGAATCTGTCGGATGGTCCGACAGACACGGGCCCGAGCCTGAGCGGACAAGG
GCCGAGTTGAAAAGCTGATCCAGCAGCGGGCTGTGCTGAGAGTGAGCTATAAGGGCTCTATCTTTATC
GCAATGCCGAAGGGTCCAGCCCCCTCGCCGCGGGGCGACCCCCCGCTCCGCCAAGGGCCCCAAGAGG
GGCACCTGTGCCCGCTGTGTCAGCACCGCCCCAACTCCAGCTCCACCGCTCCACGAGCCCTGTT
GCCGCCCGCTCCCGCTCGAGCGCCAGAGCGGCTGCCCGCGCTGCAACTGCCCGCCAAGCCCTGGGC
CCGCACAGCCGGGTCCACGCGCTCAGCGGGCTGCACCCCTCGCCGCCCCACACAGCCCTCGCGGTCC
CCCAGCAGTGGCTCCTCCAGCTGGGCCCCGAAGAGCCCCCCCCCGCAGTCGCGCTCGGGAACACCA
CTGCCCCCTCCCCCAGCCTCCTGCCCCGCTCAGCAGCAACAGCCACCTCCTCCCCAGCCCCAGCCTC
CCCCGAAGGAGGAGCGTTCGCGCGGAGGCGCAGCCAGACCGGTGTCACTCCGGGAGGTCTGAGGTA
CCTGGTGGAAGTGGTGGAGCAGCGGCAGACTCACCCGCGGTGGGTGCAGGATTGCTTGAAGAAGAG
GCAGCAGCTAGAGGCCGCTGGAAGGACCCGCTGGGTGCTCTGGCACTGCCAGGGGAGACAGACCCG
GGAGAGCCCCCTCCGCGCTTCTGCGCAGCTAGTCGATCAAAGAGAGGGGGCGAGGAGCGCGTGTGTA
GAAAGAAGAGGAGGAAGATGACGATGAGGATGAAGATGAGGAAGACGACGTGTCTGAAGTTCCGAAGTC
CCAGAGAGTGACCGCCAGCGGGCGCCAGCACCAACAGCTGAACGGCGAAAGAGGTCCGCACTGCCA
AGGAACGGTGGAAGAGTGACACCATGTGGGCCACACAGGGCCAGGACGAGGGGCGCGGCCCTGCCCC
AGGGTCCGGCACCAAGCAGGTCTTTTCAATGGCCGCAATGAATAAGGAGGGCGGGACCGCATCTGTGGCC
ACTGGTCCGCACTCTCCATCTCAGTTCCCTTCCACCCGGCAAGCCGGCCCTCCCGGCGCAGACGGCA
CACCCCTTTGGATGCCCCCAGGGCGGAAGGAAAAACAGTATCCAGTCGAGTGGAACGTGATGGACGT
GGTAGAATACTTACAGAAGCTGGCTTTCTGAGCAGGCAACCGCATTCCAGGAACAGGAATAGACGT
AAGTCACTGTGCTCATGCAGAGGACCGACGTACTGACCGGCTGTCAATTAGGCTGGGCCCCGCACTCA
AGATCTACGAACACCATATTAAAGTGTCCAGCAGGGCCACTTCGAGGACGATGATCCGACGGGTCTCT
TGGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

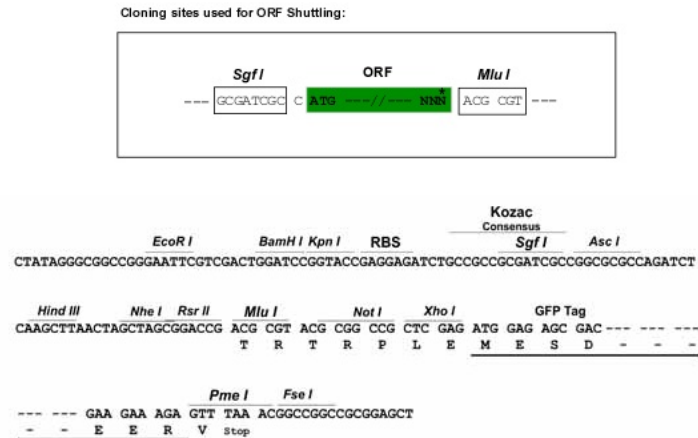
Protein Sequence: >RG216678 representing NM_138352
Red=Cloning site Green=Tags(s)

MAGPPALPPETAAAAATTAASSAASPHYQEILDTIDSLRSRKARPDLERICRMVRRRHGPEPERTR
AELEKLIQQRVLRVSYKGSISYRNAARVQPPRRGATPPAPPRAPRGAPAAAAAAPPPTAPPPPPAPV
AAAAPARAPRAAAAAATAPPSPGPAQPGPRAQRAAPLAAPPAPAAPPAVAPPAGPRRAPPPAVAAREPP
LPPPPQPPAPPQQQPPPPQPPPEGGAVRAGGAARPVSLREVVRYLGGSGGAGGRLTRGRVQGLLEE
AAARGRLERTRLGALALPRGDRPGRAPPAASARPSRSKRGGEERVLKEEEEDDEDEDEDDVSEGSEV
PESDRPAGAQHQLNGERGPQSAKERVKEWTPCGPHQGQDEGRGAPGSGTRQVF SMAAMNKEGGTASVA
TGPDSPSPVPLPPGKALPGADGTPFGCPPGRKEKPSDPVEWTVM DVVEYFTEAGFPEQATAFQEQEIDG
KSLLLMQRTDVL TGLSIRLGPALKIYEHKIVLQQGHFEDDDPDGFLG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138352

ORF Size: 1614 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.

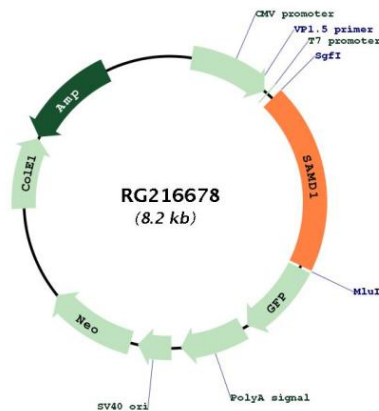
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_138352.1](#), [NP_612361.1](#)

RefSeq Size: 2396 bp

RefSeq ORF:	1617 bp
Locus ID:	90378
UniProt ID:	Q6SPF0
Cytogenetics:	19p13.12
Gene Summary:	May play a role in atherogenesis by immobilizing LDL in the atherial wall.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG216678