

Product datasheet for **RG223610**

ADAM22 (NM_016351) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAM22 (NM_016351) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADAM22
Synonyms:	ADAM 22; DEE61; EIEE61; MDC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG223610 representing NM_016351
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAGGCGGCAGTGGCTGTGTCCGTGCCCTTCTTGTGCTCTGTGTCCTGGGGACCTGCCCTCCGGCGC
 GCTGCGGCCAGGCAGGAGACGCCTCATTGATGGAGCTAGAGAAGAGGAAGGAAAACCGCTTCGTGGAGCG
 CCAGAGCATCGTGCCACTGCGCCTCATCTACCGCTCGGGCGGCGAAGACGAAAGTCGGCACGACGCGCTC
 GACACGCGGGTGCGGGGCGACCTCGGTGGCCCGCAGTTGACTCATGTTGACCAAGCAAGCTTCCAGGTTG
 ATGCCCTTGAACGTCATTCTCGATGTCGTGCTAAATCATGATTTGCTGCTCTGAATACATAGA
 GAGACACATTGAACATGGAGGCAAGACTGTGGAAGTTAAAGGAGGAGAGCACTGTACTACCAGGGCCAT
 ATCCGAGGAAACCCTGACTCATTGTTGCATTGTCAACATGCCACGGACTTCATGGGATGTTCTATGACG
 GGAACCACACATATCTCATTGAGCCAGAAGAAAATGACACTACTCAAGAGGATTTCCATTTTCATTCACT
 TTACAAATCCAGACTGTTGAATTTTCTTGGATGATCTCCATCTGAATTTAGCAAGTAAACATTACT
 CCATCAAAATTTATTTGAAGCCAAGACAAAAAGGAGTAAACGGCAGCTTCGTGATATCTCGTAATG
 TAGAAGAAGAAACCAATACATTGAACTGATGATTGTGAATGATCACCTATGTTTAAAAACATCGGCT
 TTCCGTTGTACATACCAATACCTATGCGAAATCTGTGGTGAACATGGCAGATTTAATATATAAGACCAA
 CTTAAGACCAGGATAGTATTGGTTGCTATGGAAACCTGGGCGACTGACAACAAGTTTGCCATATCTGAAA
 ATCCATTGATCACCTACGTGAGTTTATGAAATACAGGAGGGATTTATCAAAGAGAAAAGTGATGCAGT
 TCACCTTTTTTCGGGAAGTCAATTTGAGAGTAGCCGAGCGGGCAGCTTATATTGGTGGGATTTGCTCG
 TTGCTGAAAGGAGGAGCGTGAATGAATTTGGGAAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG
 TAGCCATAATATTGGTATTATCTCAGACAAAAGAAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG
 GTGGTCCGGTGCATAATGGGAGACACTGGCTATTATCTTCTAAAAAGTTCACCCAGTGAATATTGAA
 GAGTATCATGACTTCTGAATAGTGGAGGTGGTGCCTGCCTTTTCAACAACCTTCTAAGCTTCTTGATC
 CTCCTGAGTGTGGCAATGGCTTCATTGAACTGGAGAGGAGTGTGATTGTGGAACCCCGCCGAATGTGT
 CCTTGAAGGAGCAGAGTGTGTAAGAAATGCACCTTGACTCAAGACTCTCAATGCAGTGCAGGTCTTTG
 TGTAAGAAAGTCAAGTTTCAAGCCTATGGGCACTGTGTGCCGAGAAGCAGTAAATGATTGTGATATTCGTG
 AAACGTGCTCAGGAAATCAAGCCAGTGTGCCCTAATATTCATAAAATGGATGGATATTCATGTGATGG
 TGTTCAAGGAATTTGCTTTGAGGAAGATGCAAAACCAGAGATAGACAATGCAAAATACATTTGGGGCAA
 AAGGTGACAGCATCAGACAAATATTGCTATGAGAACTGAATATTGAAGGACGGAGAAGGGTAACTGTG
 GAAAGACAAAGACACATGGATACAGTGAACAACCGGATGTGCTTTGTGGTTACCTTTTGTGTACCAA
 TATTGGCAATATCCCAAGGCTTGGAGAACTCGATGGTGAATCAGTCTACTTTAGTTGTGCAGCAAGGA
 AGAACATTAAGTGCAGTGGTGGCATGTTAAGCTTGAAGAAGATGTAGATCTTGGCTATGTGGAAGATG
 GGACACCTTGTGGTCCCAATGATGTGCTTAGAACACAGGTGTCTTCTGTGGCTTCTTCAACTTTAG
 TACTTGTGAGCAGTAAAGAAGGCACTATTGCTCAGGAAATGGAGTTTGCAGTAAAGGCTGAAGTGT
 GTGTGTAACAGACACTGGATAGTTCTGATTGCAACACTACTTCCCTCACAATGATGATGCAAGACTG
 GTACTACTCTGTGGCAATGGTGTGCTGGCACCAATATCATAATAGGCATAATTGCTGGCACCATTTT
 AGTGTGGCCCTCATATTAGGAATAACTGCGTGGGTTATAAAAATATCGAGAACAGAGGTCAAATGGG
 CTCTCTATTCTTGGAGTAAAAGGATTCAGACACAAAACATATTTTCAAGACATCTGTGAAAATGGGCGAC
 CTCGAAGTAACTCTTGGCAAGGTAACCTGGGAGGCAAAAAAGAAAATCAGAGGCAAAAGATTTAGACC
 TCGGTCTAATTCAACTGAGACTTTATCTCTGCCAAGTCTCCTTCTCATCAACTGGGTCTATTGCCTCC
 AGCAGAAAATACCTTACCCAATGCCTCCACTTCTGTGAGGACAAGAAAGTGAACCGACAAAAGTGCCA
 GGCTATGGGAGACATCCATT

ACGGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

Protein Sequence: >RG223610 representing NM_016351
 Red=Cloning site Green=Tags(s)

MQAAVAVSVPFLLL CVLGTCPPARCGQAGDASLMELEKRKENRFVERQSI VPLRLIYRSGGEDES RHDAL
 DTRVVRGDLGGPQLTHVDQASFQVDAFGTSFILDVVLNHDLLSSEYIERHIEHGGKTV E VKGGEHCYYQGH
 IRGNPDSFVALSTCHGLHGMFYDGNHTYLI EPEENDTTQEDFHFHSVYKSR LFEFSLDDL PSEFQQVNI T
 PSKFILKPRPKRSKRQLRRYPRNVEEETKYIELMIVNDHLMFKKHRLSVVHTNTYAKSVVN MADLIYKDQ
 LKTRIVLVAMETWATDNKFAISENPLITLREFMKYRRDFIKEKSDAVHLFSGSQFESSRSGAAYIGGICS
 LLKGGGVNEFGKTDLMAVTLAQSLAHNIGIISDKRKLASGECKCEDTWSGCIMGDTGYLLPKKFTQC NIE
 EYHDFLNSGGGACL FNKPSKLLDPPECNGFIETGEECD CGTPAECVLEGAECCKCTL TQDSQCS DGLC
 CKKCKFQPMGTVCREAVNDCDIRETCSGNSSQCAPNIHKMDGYSCDGVQGICFGGRCKTRDRQCKYIWGQ
 KVTASDKYCYEKLNI EGTEKGNC GKDKDTWIQCNRDVL CGYLLCTNIGNI PRLGELDGEITSTL VVQQG
 RTLNCSSGGHVKLEEDVDLGYVEDGTPCGPQMMCLEHRCLPVASFNFSTCLSSKEGTICSGNGVCSNELKC
 VCNRHWIGSDCNTYFPHNDDAKGITLSGNGVAGTNIIIGIIAGTILV LALILGITAWGYKNYREQRSNG
 LSHSWSERIPDTKHI SDICENGRPRSNSWQGNLGGNKKKIRGKRFRPRS NSTETLSPAKSPSSSTGSIAS
 SRKYPYPMPLPDEDKKNRQSARLWETS I

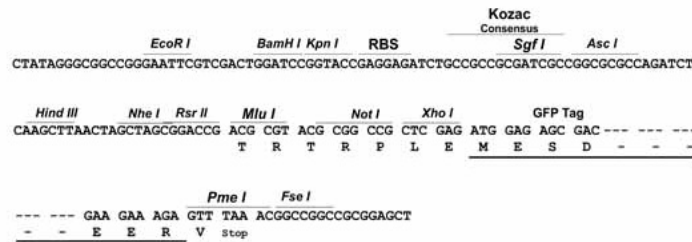
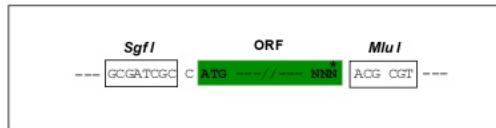
TRTRPLE - GFP Tag - V

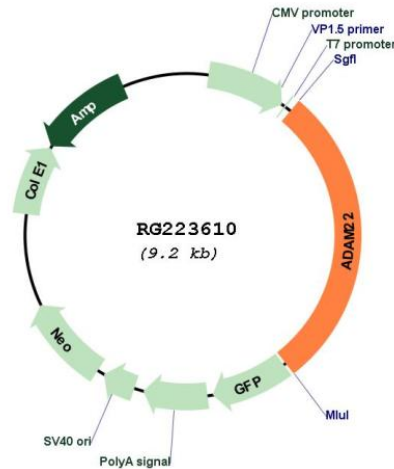
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_016351

ORF Size: 2610 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.

RefSeq: [NM_016351.6](#)

RefSeq Size: 3347 bp

RefSeq ORF: 2613 bp

Locus ID: 53616

Cytogenetics: 7q21.12

Domains: Reprolysin, DISIN, Pep_M12B_propep, ACR

Protein Families: Druggable Genome, Protease, Transmembrane

Gene Summary: This gene encodes a member of the ADAM (a disintegrin and metalloprotease domain) family. Members of this family are membrane-anchored proteins structurally related to snake venom disintegrins, and have been implicated in a variety of biological processes involving cell-cell and cell-matrix interactions, including fertilization, muscle development, and neurogenesis. Unlike other members of the ADAM protein family, the protein encoded by this gene lacks metalloprotease activity since it has no zinc-binding motif. This gene is highly expressed in the brain and may function as an integrin ligand in the brain. In mice, it has been shown to be essential for correct myelination in the peripheral nervous system. Alternative splicing results in several transcript variants.[provided by RefSeq, Dec 2010]