

## Product datasheet for **RC224615**

### ADAM22 (NM\_021722) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADAM22 (NM_021722) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADAM22
Synonyms:	ADAM 22; DEE61; EIEE61; MDC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC224615 representing NM\_021722  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAGGCGGCAGTGGCTGTGTCCGTGCCCTTCTGTGCTCTGTGCTCTGGGGACCTGCCCTCCGGCGC  
 GCTGCGGCCAGGCAGGAGACGCCTCATTGATGGAGCTAGAGAAGAGGAAGGAAAACCGCTTCGTGGAGCG  
 CCAGAGCATCGTGCCACTGCGCCTCATCTACCGCTCGGGCGGCGAAGACGAAAGTCGGCACGACGCGCTC  
 GACACGCGGGTGCGGGGCGACCTCGGTGGCCCGCAGTTGACTCATGTTGACCAAGCAAGCTTCCAGGTTG  
 ATGCCCTTGAACGTCATTCTCGATGTCGTGCTAAATCATGATTTGCTGCTCTGAATACATAGA  
 GAGACACATTGAACATGGAGGCAAGACTGTGGAAGTTAAAGGAGGAGAGCACTGTTACTACCAGGGCCAT  
 ATCCGAGGAAACCCTGACTCATTGTTGCATTGTCAACATGCCACGGACTTCATGGGATGTTCTATGACG  
 GGAACCACACATATCTCATTGAGCCAGAAGAAAATGACACTACTCAAGAGGATTTCCATTTTCATTCACT  
 TTACAAAATCCAGACTGTTGAATTTTCTTGGATGATCTCCATCTGAATTTAGCAAGTAAACATTACT  
 CCATCAAAAATTTATTTGAAGCCAAGACAAAAAGGAGTAAACGGCAGCTTCGTGATATCTCGTAATG  
 TAGAAGAAGAAAACAAAATACATTGAACTGATGATTGTGAATGATCACCTATGTTTAAAAACATCGGCT  
 TTCCGTTGTACATACCAATACCTATGCGAAATCTGTGGTGAACATGGCAGATTTAATATATAAGACCAA  
 CTTAAGACCAGGATAGTATTGGTTGCTATGGAAACCTGGGCGACTGACAACAAGTTTGCCATATCTGAAA  
 ATCCATTGATCACCTACGTGAGTTTATGAAATACAGGAGGGATTTATCAAAGAGAAAAGTGATGCAGT  
 TCACCTTTTTTCGGGAAGTCAATTTGAGAGTAGCCGAGCGGGCAGCTTATATTGGTGGGATTTGCTCG  
 TTGCTGAAAGGAGGAGGCGTGAATGAATTTGGGAAAAGTAAATGAGTAAATGAAATGAAATGAAATGAA  
 TAGCCCAATAATTTGGTATTATCTCAGACAAAAGAAAAGTTAGCAAGTGGTGAATGAAATGAAATGAA  
 GTGGTCCGGGTGCATAAATGGGAGACACTGGCTATTATCTTCTAAAAAGTTCACCCAGTGAATATTGAA  
 GAGTATCATGACTTCTGAATAGTGGAGGTGGTGCCTGCCTTTTCAACAACCTTCTAAGCTTCTTGATC  
 CTCCTGAGTGTGGCAATGGCTTCATTGAACTGGAGAGGAGTGTGATTGTGGAACCCCGCCGAATGTGT  
 CCTTGAAGGAGCAGAGTGTGTAAGAAATGCACCTTGACTCAAGACTCTCAATGCAGTGCAGGTCTTTGC  
 TGTAAAAAGTGAAGTTTCAGCCTATGGGCACTGTGTGCCGAGAAGCAGTAAATGATTGTGATATTCGTG  
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 TGTTCAAGGAATTTGCTTTGAGGAAGATGCAAAACCAGAGATAGACAATGCAAAATACATTTGGGGCAA  
 AAGGTGACAGCATCAGACAAATATTGCTATGAGAACTGAATATTGAAGGACGGAGAAGGGTAACTGTG  
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 TATTGGCAATATCCCAAGGCTTGGAGAAGTTCGATGGTGAATCAGTCTACTTTAGTTGTGCAGCAAGGA  
 AGAACATTAAGTGCAGTGGTGGGCATGTTAAGCTTGAAGAAGATGTAGATCTTGGCTATGTGGAAGATG  
 GGACACCTTGTGGTCCCAATGATGTGCTTAGAACACAGGTGTCTTCTGTGGCTTCTTCAACTTTAG  
 TACTTGTGAGCAGTAAAGAAGGCACTATTGCTCAGGAAATGGAGTTTGCAGTAAATGAGCTGAAGTGT  
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 GTACTACTCTGTCTGGCAATGGTGTGCTGGCACCAATATCATAATAGGCATAATTGCTGGCACCATTTT  
 AGTGTGGCCCTCATATTAGGAATAACTGCGTGGGTTATAAAAACTATCGAGAACAGAGGTCAAATGGG  
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 CTGGGTCTATTGCCTCCAGCAGAAAATACCCTTACCCAATGCCTCCACTTCTGTGAGGACAAGAAAAGT  
 GAACCGACAAAGTGCCAGGCTATGGGAGACATCCATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224615 representing NM\_021722  
 Red=Cloning site Green=Tags(s)

MQAAVAVSVPFLLL CVLGTCPPARCGQAGDASLMELEKRKENRFVERQSI VPLRLIYRSGGEDES RHDAL  
 DTRVVRGDLGGPQLTHVDQAS FQVDAFGTSFILDVVLNHDLLSSEYIERHIEHGGKTV EVKGGEH CYQGH  
 IRGNPDSFVALSTCHGLHGMFYDGNHTYLI EPEENDTTQEDFHFHSVYKSRLFEFSLDDL PSEFQQVNIT  
 PSKFILKPRPKRSKRQLRRYPRNVEEETKYIELMIVNDHLMFKKHRLSVVHTNTYAKSVVN MADLIYKDQ  
 LKTRIVLVAMETWATDNKFAISENPLITLREFMKYRRDFIKEKSDAVHLFSGSQFESSRSGAAYIGGICS  
 LLKGGGVNEFGKTDLMAVTLAQS LAHNIGIISDKRKLASGECKCEDTWSGCIMGDTGYLLPKKFTQC NIE  
 EYHDFLNSGGGACL FNKPSKLLDPPECGNGFIETGEECD CGTPAECVLEGAECCKCTLTQDSQCS DGLC  
 CKKCKFQPMGTVCREAVNDCDIRETCSGNSSQCAPNIHKMDGYSCDGVQGICFGGRCKTRDRQCKYIWGQ  
 KVTASDKYCYEKLNI EGTEKGNC GKDKDTWIQCNRDVL CGYLLCTNIGNIPRLGELDGEITSTL VVQQG  
 RTLNCSSGHV KLEEDVDLGYVEDGTPCGPQMMCLEHRCLPVASFNFSTCLSSKEGTICSGNGVCSNELKC  
 VCNRHWIGSDCNTYFP HNDDAKTGITLSGNGVAGTNIIIGIIAGTILVLALILGITAWGYKNYREQRSNG  
 LSHSWSERIPDTKHI SDICENGRPRSNSWQGNLGGNKKKIRGKRFRPRSNSTEYLNPFWKRDY NVAKWVE  
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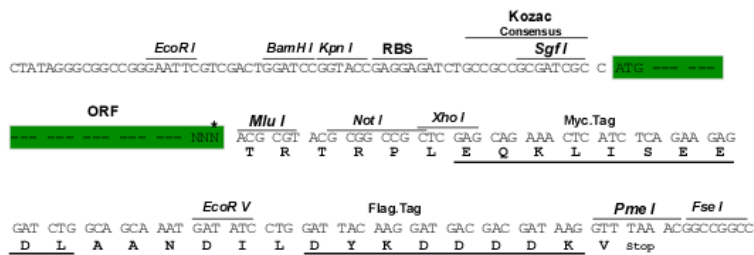
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8010\\_f07.zip](https://cdn.origene.com/chromatograms/mk8010_f07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

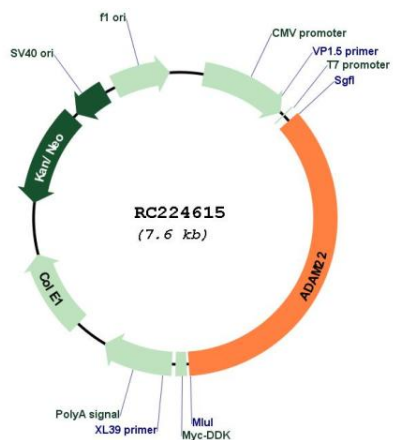


\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_021722

<b>ORF Size:</b>	2697 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021722.6</a>
<b>RefSeq Size:</b>	3393 bp
<b>RefSeq ORF:</b>	2700 bp
<b>Locus ID:</b>	53616
<b>UniProt ID:</b>	<a href="#">Q9P0K1</a>
<b>Cytogenetics:</b>	7q21.12
<b>Domains:</b>	Reprolysin, DISIN, Pep_M12B_propep, ACR
<b>Protein Families:</b>	Druggable Genome, Protease, Transmembrane
<b>MW:</b>	97.7 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC224615