

Product datasheet for **RG221045**

ADAM21 (NM_003813) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAM21 (NM_003813) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADAM21
Synonyms:	ADAM 21; ADAM31
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG221045 representing NM_003813
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCAGTGGATGGGACCCTCGTGACATCAGGGTCACTCTTCTGCTGCTCTGGCTTGGGTATTTTGT
 CTATTTCCGGCTACTGTCAGGCTGGGCCCTCCAGCATTTCACTTCCCGGAAGTGGTGATCCCCTTGAA
 GGTGATCAGCAGGGGCAGAAAGTCAAGGCTCCTGGATGGCTCTCCTATAGTCTGCGGTTTGGGGCCAG
 AAACACGTTGTTTATGAGGGTCAAGAAGCTCTTAGTTTCTAGACACCTCCAGTGTTACCTACACAG
 ATGAGCGTGCCTCTGGAGGATCAGCTCTTATCCAGATGACTGTTACTATCATGTTACGTGGAGGG
 TGCCCTGAGTCTCTGTTGTGTTCACTGCTTGTGTTGGGGCTTTCGAGGAGTATTAATAAAGTGGC
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 GCTATGGGTGGTCCCCACCCTACTGCCAGCACAGAGGCTATGGGGCAGTATTGACAGTGGCCAGCATC
 TGCAAAGAGAGGAGTTTTTTGCCGCTGATTGTGATTCTTCTTGTCTGTTTGAATTTCTGTTTACT
 GTCGGGCTTCTTATGTATCTACGACAATGTTCTGGTCCCAAGAACTAAGGCTCATTATCAGGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG221045 representing NM_003813
 Red=Cloning site Green=Tags(s)

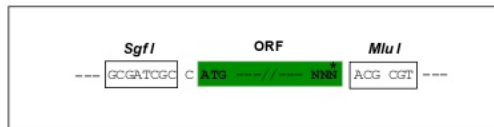
MAVDGTLVYIRVTLLLLWLGVFLSISGYCQAGPSQHFTSPEVVIPLKVISRGRSAKAPGWSYSLRFGGQ
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 LTYEIEPIRHSATFEHLVYKVNSETQFPAMRCGLTEKEVARQQLEFEEAENSALEPKSAGDWWTHAWFL
 ELVVVVNHDFFIYSQSNISKVQEDVFLVNIIVDSMYQLGTYYIILIGIEIWNQGNVFPMTSIEQVLNDFS
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 HDEEFCFCGERGCIMNTFRVPAEKFTNCSYADFMKTTLNQGSCSLHNPPRLGEIFMLKRCGNGVVEREEQC
 DCGSVQQCEQDACCLLNCTLRPGAACAFGLCKDCKFMPSGELCRQEVNECDLPEWCNGTSHQCPEDRYV
 QDGIPCSDSAYCYQKRCNNHDQHCREIFGKDAKSASQNCYKEINSQGNRFHCGINGTTYLKCHISDVFC
 GRVQCENVRDIPLLQDHFTLQHTHINGVTCWGIDYHLRMNISDIGEVKDGTVCGPGKICIHKKCVSLSVL
 SHVCLPETCNMKGICNNKHHCHCGYGSPPYQHRGYGGSIDSGPASAKRGVFLPLIVIPSLSVLTFLFT
 VGLLMYLRQCSGPKETKAHSSG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



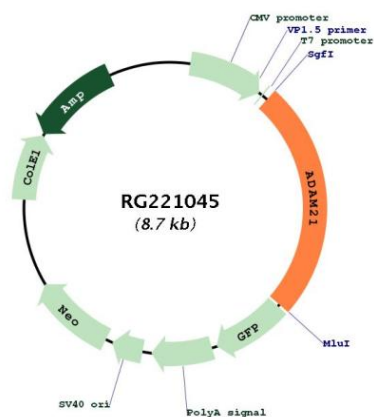
EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGCGCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCGCGATCGCCGCGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGTAGTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
 T R T R P L E M E S D - - -
 --- --- GAA GAA AGA GTT TAA ACGGCGGCGCGGAGCT
 - - E E R V Stop

ACCN: NM_003813

ORF Size: 2166 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_003813.2 , NP_003804.1
RefSeq Size:	2406 bp
RefSeq ORF:	2169 bp
Locus ID:	8747
UniProt ID:	Q9UKJ8
Cytogenetics:	14q24.2
Protein Families:	Protease, Transmembrane
Gene Summary:	<p>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. The expression of this gene expression is testis-specific. [provided by RefSeq, May 2011]</p>

Product images:



Circular map for RG221045