

Product datasheet for RC211602

ADAMTS3 (NM_014243) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAMTS3 (NM_014243) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADAMTS3
Synonyms:	ADAMTS-4; HKLLS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211602 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTCTCTGTCACTTTGGTTGATAGCAGCCGCTCTGGTAGAGTTAGGACTTCAGCTGATGGACAAG
CTGGTAATGAAGAAATGGTGCAAATAGATTTACCAATAAAGAGATATAGAGAGTATGAGCTGGTACTCC
AGTCAGCACAAAATCTAGAAGGACGCTATCTCTCCATACTCTTTCTGCGAGTCACAAAAAGAGGTCAGCG
AGGGACGTGTCTCCAACCTGAGCAGTTGTTCTTTAACATCACGGCATTGGAAAAGATTTTCATCTGC
GACTAAAGCCCAACTCACTAGTAGCTCCTGGGGCTGTGTGGAGTGGCATGAGACATCTCTGGTGCC
TGGGAATAAACCAGTCCATTAAACAACATCAACCAGGAAGTGCTACGTATAGAATCCGGAAAACAGAG
CCTTTCAGACTAACTGTGCTTATGTTGGTGACATCGTGGACATTCCAGGAACCTCTGTTGCCATCAGCA
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TATCGAGGTAAGTCTGGGAGTGGATGACTCTGTGGTCCGTTTCCATGGCAAAGAGCAGTCCAAAACACTAC
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GACCATGCAATTTTTTTAAACCAGGCAAGACTTTGGACCTGCTGGAATGCAAGGATATGCTCCAGTACCCG
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AAAATGTGCACCGCGTTCCGAACCTTTGACCCATGTAACAGCTGTGGTGTAGCCATCCTGATAATCCCT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211602 protein sequence
 Red=Cloning site Green=Tags(s)

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MVL LSLWLIAAALVEVRTSADGQAGNEEMVQIDLPIKRYREYELVTPVSTNLEGRYLSHTLSASHKKRSA
RDVSSNPEQLFFNITAFGKDFHLRLKPNTQLVAPGAVVEWHETSLVPGNITDPIINNHQPGSATYRIRKTE
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LLTLMNIVNEIYHDESLGVHINVLVRMIMLGYAKSISLIERGNPSRSLENVCRWASQQQRSDLNHSEHH
DHAIFLTRQDFGPAGMQGYAPVTGMCHPVRSC TLNHEDGFSSAFVVAHETGHVLMGMEHDGQGNRCGDETA
MGSVMAPLVQAAFHRYHWSRCSGQELKRYIHSYDCLLDDPFDDHWPKLPELPGINYSMDQCRDFDVG VY
KMCTAFRTFDPCQQLWCSHPDNPYFCKTKKGPPLDGTECAAGKWCYKGHC MWKNANQQKQDGNWGSWTKF
GSCSRTC GTGVRFRTRQCNNPMPINGGQDCPGVNF EYQLCNTEECQKHFEDFRAQQCQRNSHF EYQNTK
HHWLPYEHDPK KRCHLYCQSKETGDVAYMKQLVHDGTHCSYKDPYSICVRGECVKVGC DKEIGSNKVED
KCGVCGGDNSHCRTVKGTFRTRPRKLG YLKMFDIPPGARHVL IQEDEASPHILAIKNQATGHYILNGKGE
EAKSRTFIDLGV EWDYNI EDDIESLHTDGPLHDPVIVL IIPQENDTRSSLTYKYI IHEDSVPTINSNNVI
QEELDTFEWALKSWSQCSKPCGGGFQYTKYGCRRKSDNKMVHRSFCEANKKPKPIRRMCNIQECTHPLWV
AEEWEHCTKTCGSSGYQLRTVRCLQPLLDGTNRSVHSKYCMGDRPESRRPCNRVPCPAQWKTPWSECSV
TCGEGTEVRQVL CRAGDHCDGKPE SVRACQLPPCNDEPCLGDKSIFCQMEVLARYCSIPGYNLCCESC
SKRSSTLPPPYLLEAAETHDDVISNPSDLPRSLVMPTSLVPYHSETPAKKMSLSSISSVGGPNAYAAFRP
NSKPDGANLRQSAQQAGSKTVRLVTVSPSPPTKR VHLSASQMAAASFFAASDSIGASSQARTSKKDGK
IIDNRRPTRSSTLER
  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_014243

ORF Size: 3615 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_014243.1](#), [NP_055058.1](#)

RefSeq Size: 5836 bp

RefSeq ORF: 3618 bp

Locus ID: 9508

UniProt ID: [O15072](#)

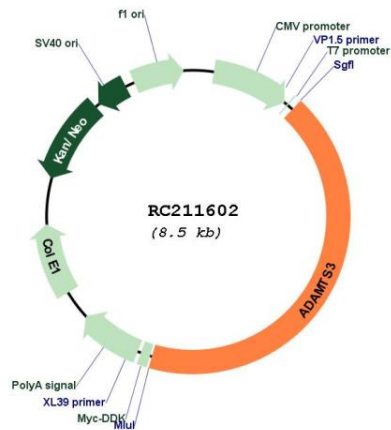
Cytogenetics: 4q13.3

Protein Families: Druggable Genome, Protease, Secreted Protein

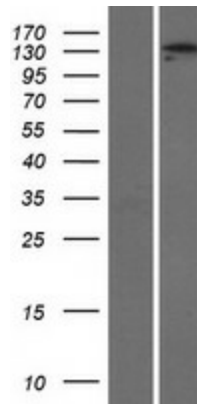
MW: 135.6 kDa

Gene Summary:

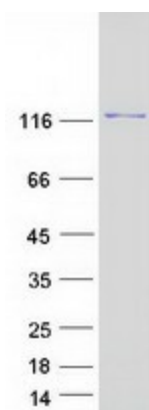
This gene encodes a member of the ADAMTS (a disintegrin and metalloproteinase with thrombospondin motifs) protein family. Members of the family share several distinct protein modules, including a propeptide region, a metalloproteinase domain, a disintegrin-like domain, and a thrombospondin type 1 (TS) motif. Individual members of this family differ in the number of C-terminal TS motifs, and some have unique C-terminal domains. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease, a member of the procollagen aminoproteptidase subfamily of proteins, may play a role in the processing of type II fibrillar collagen in articular cartilage. [provided by RefSeq, Feb 2016]

Product images:


Circular map for RC211602



Western blot validation of overexpression lysate (Cat# [LY415411]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211602 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADAMTS3 protein (Cat# [TP311602]). The protein was produced from HEK293T cells transfected with ADAMTS3 cDNA clone (Cat# RC211602) using MegaTran 2.0 (Cat# [TT210002]).