

Product datasheet for **SC112913**

ADAM12 (NM_021641) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAM12 (NM_021641) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADAM12
Synonyms:	ADAM12-OT1; CAR10; MCMP; MCMPMItna; MLTN; MLTNA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC112913 sequence for NM_021641 edited (data generated by NextGen Sequencing)

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ATGGCAGCGCGCCCGCTGCCCGTGTCCCCGCCCGCGCCCTCCTGCTCGCCCTGGCCGGT
GCTCTGCTCGCGCCCTGCGAGGCCCGAGGGGTGAGCTTATGGAACCAAGGAAGAGCTGAT
GAAGTTGTCAGTGCCTCTGTTGGGAGTGGGGACCTCTGGATCCCAGTGAAGAGCTTCGAC
TCCAAGAATCATCCAGAAGTGTGAATATTCGACTACAACGGGAAAGCAAAGAAGTATGATC
ATAAATCTGAAAAGAAATGAAGGTCTCATTGCCAGCAGTTTCACGGAAACCCACTATCTG
CAAGACGGTACTGATGTCTCCCTCGCTCGAAATTACACGGTAATTCTGGGTCACTGTTAC
TACCATGGACATGTACGGGGATATTCTGATTACAGCAGTCACTCAGCACGTGTTCTGGT
CTCAGGGGACTTATTGTGTTGAAAATGAAAGCTATGTCTTAGAACCAATGAAAAGTGCA
ACCAACAGATACAACTCTCCAGCGAAGAAGCTGAAAAGCGTCCGGGGATCATGTGGA
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TGGCAAGAAGGCATAAAAGAGAGACCCTCAAGGCAACTAAGTATGTGGAGCTGGTGATC
GTGGCAGACAACCGAGAGTTTCAGAGGCAAGGAAAAGATCTGGAAAAAGTTAAGCAGCGA
TTAATAGAGATTGCTAATCACGTTGACAAGTTTTACAGACCACTGAACATTCGGATCGTG
TTGGTAGGCGTGAAGTGTGGAATGACATGGACAATGCTCTGTAAGTACAGGACCCATTC
ACCAGCCTCCATGAATTTCTGGACTGGAGGAAGATGAAGCTTCTACCTCGCAAATCCCAT
GACAAATGCGCAGCTTGTGAGTGGGGTTTATTTCCAAGGGACCACCATCGGCATGGCCCA
ATCATGAGCATGTGCACGGCAGACCAGTCTGGGGAAATTGTCATGGACCATTCAGACAA
CCCCTTGGTGCAGCCGTGACCCTGGCACATGAGCTGGGCCACAATTTGGGATGAATCAT
GACACACTGGACAGGGGCTGTAGCTGTCAAATGGCGTTGAGAAAAGGAGGCTGCATCATG
AACGCTTCCACCGGTACCCATTTCCATGGTGTTCAGCAGTTGCAGCAGGAAGGACTTG
GAGACCAGCTGGAGAAAAGGAATGGGGGTGTGCCTGTTTAACTGCCGGAAGTCAAGGG
TCTTTCGGGGCCAGAAGTGTGGGAACAGATTTGTGGAAGAAGGAGAGGAGTGTGACTGT
GGGGAGCCAGAGGAATGTATGAATCGCTGCTGCAATGCCACCACCTGTACCCTGAAGCCG
GACGCTGTGTGCGCACATGGGCTGTGCTGTGAAGACTGCCAGCTGAAGCCTGCAGGAACA
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GCAATGCAGTGCCACGGCAGAGGGGTGTGCAACAACAGGAAGAACTGCCACTGCGAGGCC
CACTGGGCACCTCCCTTCTGTGACAAGTTTGGCTTTGGAGGAAGCACAGACAGCGGCCCC
ATCCGGCAAGCAGAAGCAAGGCAGGAAGCTGCAGAGTCCAACAGGGAGCGCGGCCAGGGC
CAGGAGCCCGTGGGATCGCAGGAGCATGCATCTACTGCCTCACTGACACTCATCTGA

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Clone variation with respect to NM_021641.3
 2190 g=>a

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021641 unedited
 CGTTCACATTTGTATACGACTCCTATAGGGCGGCCGGAATTCGCACCAGGCTCTTCCTA
 GTCCCCGGGCCAACTCGGACAGTTTGTCTATTTATTGCAACGGTCAAGGCTGGCTTGTGC
 CAGAACGGCGCGCGCGCGCACGCACACACACGGGGGAAACTTTTTTAAAAATG
 AAAGGCTAGAAGAGCTCAGCGCGGGCGGGGCGCTGCGCGAGGGCTCCGGAGCTGACTCG
 CCGAGGCAGGAAATCCCTCCGGTCGCGACGCCCGCCCGGCTCGGCGCCCGCTGGGAT
 GGTGCAGCGCTCGCCGCGGGCCCGAGAGCTGCTGCACGAAGGCCGGCGACGATGGCAG
 CGCGCCCGCTGCCGTGTCCCCCGCCCGCCCTCCTGCTCGCCCTGGCCGGTGTCTGC
 TCGCGCCCTGCGAGGCCGAGGGGTGAGCTTATGGAACCAAGGAAGAGCTGATGAAGTTG
 TCAGTGCCTCTGTTGGGAGTGGGACCTCTGGATCCCAGTGAAGAGCTTCGACTCCAAGA
 ATCATCCAGAAGTGTGAATATTCGACTACAACGGGAAAGCAAAGAACTGATCATAAATC
 TGGAAAGAAATGAAGGTCTCATTGCCAGCAGTTTACGGAAACCCACTATCTGCAAGACG
 GTACTGATGTCTCCCTCGCTCGAAATACACGGGTATTCTGGGTCAGTGTACTACCATGG
 ACATGTACGGNGATATTCTGATTACAGCAGTCAGTCTCAGCACGTGTTCTGGTCTCAGGNG
 ACTTATTGTGTTTAAAAATGAAAGCTATGNTCTTANACCNATGGAAANGTGCACCCAACA
 GATACAACCTTTCCAGCGAAAGAGCTGAANAGCGTCCGGGGTTCATGTTGGTCACATTA
 CAACACACAAAACCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_021641 unedited
 AATGGAAATACTGTGNACCGGCCCTAGCTATGATCNATTTTTCTTTTTTTTTTTTTATTT
 CAAATGCACTCTATTTTATGCAGTAATGGCCACGGGGATGGAGTTAGGCTCTTACATTG
 TTTTCACTTTTTAACATTCTTACTTGTTAAATGAAGGGTTGGTACTCTGTGGGTTCCCT
 GGCTTTCTGCAAACCTCAAACCTGAGTACTGTTTTTACGCATGTCCACAGCAAAGAGC
 CAGAGTTCACCGCCCTTCTCCTACCTTCTTCTCCAGTTTGTTTCAATGCCATTCAAGTTT
 GCTTGGATGGAGATGGAATGGGTGGCAGGGTCTCTGATAAATAAAAACTAAAACCTGC
 TATTTTCATATAATAAATGCTAAAAGCCATATCAGAGCATTAAAGTTGCAGCCAGAGACCA
 GTCATCAGGGCTGCCAAGGCTGAAGTGTCACTGGGAAAGGGGACACTGGGCCCAACCTT
 TGCTTCTCCCCACTGCTGTGGGGGCTCATTGAAAGGCCAGACTTTTGAGTCCTTCTCT
 CCTTGCTGCAGGGCTGGGGCCTGCCAGAGTGGTAACCTGCTACTCTCAAGGGCAGCCC
 TGAAGCATGTCCATGTTTTAGCAGAAGCTCATCCTGGAAGACGCTGCACTACCTTGCCCT
 GTTTTTGCAGACGTGCCTGGTACGCTGCACTTTCCCTCCTGAAAGCCCAAAAAGTACAT
 AAGTCCTGATGTCATGGA AAAACACGGGCCAGGCCCCAGCCGCAGGCACGTGACCCAAC
 AGAGGGCCACAGGAAACAAAAGGACCATAATTAGATAACCTAATATCTACAAGGACTACC
 GAATTAATGGGGAAGGCCTACAATATAACAGGTAAGCACTTACACAGAAGTGTGGCCGGC
 A

Restriction Sites:

NotI-NotI

ACCN:

NM_021641

Insert Size:

3750 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](#)

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_021641.2](#), [NP_067673.2](#)

RefSeq Size: 3355 bp

RefSeq ORF: 2217 bp

Locus ID: 8038

UniProt ID: [O43184](#)

Cytogenetics: 10q26.2

Protein Families: Druggable Genome, Protease, Secreted Protein, Transmembrane

Gene Summary: This gene encodes a member of a family of proteins that are 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. Expression of this gene has been used as a maternal serum marker for pre-natal development. Alternative splicing results in multiple transcript variants encoding different isoforms. Shorter isoforms are secreted, while longer isoforms are membrane-bound form. [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (2) lacks multiple 3' coding exons and contains an alternate 3' terminal exon, resulting in a different 3' coding region and 3' UTR, compared to variant 1. The encoded isoform (2, also known as ADAM12-S) has a distinct C-terminus and is shorter than isoform 1.