

Product datasheet for **SC304964**

ADAM17 (NM_021832) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAM17 (NM_021832) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADAM17
Synonyms:	TACE, cSVP, CD156b, MGC71942
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_021832 edited
 ATGAGGCAGTCTCTCCTATTCTGACCAGCGTGGTTTCCTTTCGTGCTGGCGCCGCGACCT
 CCGGATGACCCGGGCTTCGGCCCCACCAGAGACTCGAGAAGCTTGATTCTTTGCTCTCA
 GACTACGATATTCTCTTTATCTAATATCCAGCAGCATTGCGTAAGAAAAAGAGATCTA
 CAGACTTCAACACATGTAGAAACACTACTAACTTTTTTCAGCTTTGAAAAGGCATTTTAAA
 TTATACCTGACATCAAGTACTGAACGTTTTTTCACAAAAATTTCAAGGTCGTGGTGGTGGAT
 GGTAAAAACGAAAGCGAGTACACTGTAATAATGGCAGGACTTCTTCACTGGACACGTGGTT
 GGTGAGCCTGACTCTAGGGTTCTAGCCACATAAGAGATGATGATTATAATCAGAATC
 AACACAGATGGGGCCGAATATAACATAGAGCCACTTTGGAGATTTGTTAATGATACCAAA
 GACAAAAGAATGTTAGTTTAT:AAATCTGAAGATATCAAG:AATG:TTTC:ACG:TTTGC
 AGTCTCCAAAAGTGTGTGGTTATTTAAAAGTGGATAATGAAGAGTTGCTCCAAAAGGGT
 TAGTAGACAGAGAACCACCTGAAGAGCTTGTTCATCGAGTGAAAAGAAGAGCTGACCCAG
 ATCCCATGAAGAACACGTGTAATTTATTGGTGGTAGCAGATCATCGTTCTACAGATACA
 TGGGCAGAGGGGAAGAGAGTACAACACTACAATTACTTAATAGAGCTAATTGACAGAGTTG
 ATGACATCTATCGGAACACTTTCATGGGATAATGCAGGTTTTAAAGGCTATGGAATACAGA
 TAGAGCAGATTCCGATTCTCAAGTCTCCACAAGAGGTAACCTGGTAAAAGCACTACA
 ACATGGCAAAAAGTTACCAAAATGAAGAAAAGGATGCTTGGGATGTGAAGATGTTGCTAG
 AGCAATTTAGCTTTGATATAGCTGAGGAAGCATCTAAAGTTTGCTTGGCACACCTTTTCA
 CATACCAAGATTTTGATATGGGAACTCTTGATTAGCTTATGTTGGCTCTCCAGAGCAA
 ACAGCCATGGAGGTGTTTGTCCAAAGGCTTATTATAGCCAGTTGGGAAGAAAAATATCT
 ATTTGAATAGTGGTTTGCAGGACACAAAGAATTATGGTAAAACCATCCTTACAAAGGAAG
 CTGACCTGGTTACAACCTCATGAATTGGGACATAATTTTGGAGCAGAACATGATCCGGATG
 GTCTAGCAGAATGTGCCCGAATGAGGACCAGGGAGGGAATATGTCATGTATCCCATAG
 CTGTGAGTGGCGATCACGAGAACAATAAGATGTTTTCAAACCTGCAGTAAACAATCAATCT
 ATAAGACCATTGAAAGTAAGGCCAGGAGTGTTCCTCAAGAACGCAGCAATAAAGTTTGTG
 GAACTCGAGGGTGGATGAAGGAGAAGAGTGTGATCCTGGCATCATGTATCTGAACAACG
 ACACCTGCTGCAACAGCGACTGCACGTTGAAGGAAGGTGTCCAGTGCAGTGACAGGAACA
 GTCCTTGCTGTA AAAACTGTCAGTTTGGAGACTGCCAGAAGAAGTCCAGGAGGCGATTA
 ATGCTACTTGCAAAGCGTGTCTACTGCACAGGTAATAGCAGTGAGTGCCCGCCTCCAG
 GAAATGCTGAAGATGACACTGTTTGGCTTGGATCTTGGCAAGTGAAGGATGGGAAATGCA
 TCCCTTTCTGCGAGAGGGAACAGCAGCTGGAGTCTGTGCATGTAATGAAACTGACAAC
 CCTGCAAGGTGTGCTGCAGGGACCTTTCTGGCCGCTGTGTGCCCTATGTGATGCTGAAC
 AAAAGAACCTATTTTTGAGGAAAGGAAAGCCCTGTACAGTAGGATTTTGTGACATGAATG
 GCAAAATGTGAGAAACGAGTACAGGATGTAATTGAACGATTTTGGGATTTTCATTGACCAGC
 TGAGCATCAATACTTTTGGAAAGTTTTAGCAGACAACATCGTTGGGTCTGTCTGGTTT
 TCTCCTTGATATTTTGGATTCTTTTCAGCATTCTTGTCCATTGTGTGTA

Restriction Sites: Please inquire

ACCN: NM_021832

Insert Size: 2100 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: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_021832.1.

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_021832.1](#), [NP_068604.1](#)

RefSeq Size: 3473 bp

RefSeq ORF: 2085 bp

Locus ID: 6868

Cytogenetics: 2p25.1

Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: Alzheimer's disease, Epithelial cell signaling in Helicobacter pylori infection, Notch signaling pathway

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 biologic processes involving cell-cell and cell-matrix interactions, including fertilization, muscle development, and neurogenesis. The encoded preproprotein is proteolytically processed to generate the mature protease. The encoded protease functions in the ectodomain shedding of tumor necrosis factor-alpha, in which soluble tumor necrosis factor-alpha is released from the membrane-bound precursor. This protease also functions in the processing of numerous other substrates, including cell adhesion proteins, cytokine and growth factor receptors and epidermal growth factor (EGF) receptor ligands, and plays a prominent role in the activation of the Notch signaling pathway. Elevated expression of this gene has been observed in specific cell types derived from psoriasis, rheumatoid arthritis, multiple sclerosis and Crohn's disease patients, suggesting that the encoded protein may play a role in autoimmune disease. Additionally, this protease may play a role in viral infection through its cleavage of ACE2, the cellular receptor for SARS-CoV and SARS-CoV-2. [provided by RefSeq, Aug 2020]

Transcript Variant: This variant (2) contains a 50 bps deletion in 3'- coding region, as compared to variant 1. As a result of a deletion and frame shift, isoform 2 encoded by this variant lacks a cytoplasmic domain containing 130 amino acids, as compared to isoform 1 encoded by variant 1.