

## Product datasheet for **SC316426**

### **ADAM17 (NM\_003183) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ADAM17 (NM_003183) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADAM17
Synonyms:	ADAM18; CD156B; CSVP; NISBD; NISBD1; TACE
Mammalian Cell Selection:	Neomycin
Vector:	<u><a href="#">PCMV6-Neo</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_003183 edited  
 ATGAGGCAGTCTCTCCTATTCTGACCAGCGTGGTTTCCTTTCGTGCTGGCGCCGCGACCT  
 CCGGATGACCCGGGCTTCGGCCCCACCAGAGACTCGAGAAGCTTGATTCTTTGCTCTCA  
 GACTACGATATTCTCTTTATCTAATATCCAGCAGCATTGCGTAAGAAAAAGAGATCTA  
 CAGACTTCAACACATGTAGAAACACTACTAACTTTTTTCAGCTTTGAAAAGGCATTTTAAA  
 TTATACCTGACATCAAGTACTGAACGTTTTTTCACAAAAATTTCAAGGTCGTGGTGGTGGAT  
 GGTAAAAACGAAAGCGAGTACACTGTAATAATGGCAGGACTTCTTCACTGGACACGTTGGTT  
 GGTGAGCCTGACTCTAGGGTTCTAGCCACATAAGAGATGATGTTATAATCAGAATC  
 AACACAGATGGGGCCGAATATAACATAGAGCCACTTTGGAGATTTGTTAATGATACCAAA  
 GACAAAAGAATGTTAGTTTATAAATCTGAAGATATCAAGAATGTTTCACGTTTGCAGTCT  
 CCCAAAGTGTGTGGTTATTTAAAGTGGATAATGAAGAGTTGCTCCAAAAGGGTTAGTA  
 GACAGAGAACCACCTGAAGAGCTTGTTCATCGAGTGAAAAGAAGAGCTGACCCAGATCCC  
 ATGAAGAACACGTGTAATTTATGGTGGTAGCAGATCATCGTCTACAGATACATGGGC  
 AGAGGGGAAGAGAGTACAACATAAATTAATAGAGCTAATTGACAGAGTTGATGAC  
 ATCTATCGGAACACTTTCATGGGATAATGCAGGTTTTAAAGGCTATGGAATACAGATAGAG  
 CAGATTCGCATTCTCAAGTCTCCACAAGAGGTAACCTGGTAAAAGCACTACAACATG  
 GCAAAAAGTTACCAAAATGAAGAAAAGGATGCTTGGGATGTGAAGATGTTGCTAGAGCAA  
 TTAGCTTTGATATAGCTGAGGAAGCATCTAAAGTTTGCTTGGCACACCTTTTCACATAC  
 CAAGATTTTGATATGGAACTCTTGATTAGCTTATGTTGGCTCTCCAGAGCAAACAGC  
 CATGGAGGTGTTTGTCCAAAGGCTTATTATAGCCAGTTGGGAAGAAAAATATCTATTTG  
 AATAGTGGTTTGACGAGCACAAAGAATTATGGTAAAACCATCCTTACAAAGGAAGCTGAC  
 CTGGTTACAACATCATGAATTGGGACATAATTTTGGAGCAGAACATGATCCGGATGGTCTA  
 GCAGAATGTGCCCGAATGAGGACCAGGGAGGAAATATGTCATGTATCCCATAGCTGTG  
 AGTGGCGATCACGAGAACAATAAGATGTTTTCAAAGTGCAGTAAACAATCAATCTATAAG  
 ACCATTGAAAGTAAAGGCCAGGAGTGTTCAGAACGCAGCAATAAAGTTTGTGGGAAC  
 TCGAGGGTGGATGAAGGAGAAGAGTGTGATCCTGGCATCATGTATCTGAACAACGACACC  
 TGCTGCAACAGCGACTGCACGTTGAAGGAAGGTGCCAGTGCAGTGACAGGAACAGTCTCT  
 TGCTGTAAAACTGTCAGTTTGGAGACTGCCCAGAAGAAGTCCAGGAGGCGATTAATGCT  
 ACTTGCAAAGGCGTGTCTACTGCACAGGTAATAGCAGTGAGTGCCTCCAGGAAAT  
 GCTGAAGATGACTGTTTGGTGGATCTTGGCAAGTGAAGGATGGGAAATGCATCCCT  
 TTCTGCGAGAGGGAACAGCAGCTGGAGTCTGTGCATGTAATGAAACTGACAACCTCTGC  
 AAGGTGTGCTGCAGGGACCTTTCTGGCCGCTGTGTGCCCTATGTGATGCTGAACAAAAG  
 AACTTATTTTTGAGGAAAGGAAAGCCCTGTACAGTAGGATTTTGTGACATGAATGGCAAA  
 TGTGAGAAACGAGTACAGGATGTAATTGAACGATTTTGGGATTTTATTGACCAGCTGAGC  
 ATCAATACTTTTGGAAAGTTTTAGCAGACAACATCGTTGGGCTGTCTCTGGTTTTCTCC  
 TTGATATTTTGGATTCTTTTTCAGCATTCTTGTCCATTGTGTGGATAAGAAATGGATAAA  
 CAGTATGAATCTCTGTCTCTGTTTACCCAGTAACGTCGAAATGCTGAGCAGCATGGAT  
 TCTGCATCGTTTCGATTATCAAACCTTTCTGCGCCCCAGACTCCAGGCCGCTGCAG  
 CCTGCCCTGTGATCCCTTCGGCGCCAGCAGCTCCTAAACTGGACCACCAGAGAATGGAC  
 ACCATCCAGGAAGACCCAGCACAGACTCACATATGGACGAGGATGGGTTTGAAGGAC  
 CCTTCCCAAATAGCAGCACAGCTGCCAAGTATTTGAGGATCTCACGGACCATCCGGTC  
 ACCAGAAGTGAAGGCTGCCTCTTTAAACTGCAGCGTCAGAATCGTGTGACAGCAAA  
 GAAACAGAGTGCTAA

**Restriction Sites:** Please inquire  
**ACCN:** NM\_003183  
**Insert Size:** 2500 bp

<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.NA</p>
<b>Components:</b>	<p>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).</p>
<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>	<p><a href="#">NM_003183.4</a>, <a href="#">NP_003174.3</a></p>
<b>RefSeq Size:</b>	<p>3572 bp</p>
<b>RefSeq ORF:</b>	<p>2475 bp</p>
<b>Locus ID:</b>	<p>6868</p>
<b>UniProt ID:</b>	<p><a href="#">P78536</a></p>
<b>Cytogenetics:</b>	<p>2p25.1</p>
<b>Protein Families:</b>	<p>Druggable Genome, Protease, Transmembrane</p>
<b>Protein Pathways:</b>	<p>Alzheimer's disease, Epithelial cell signaling in Helicobacter pylori infection, Notch signaling pathway</p>

**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 (1) contains a 50 bps insertion in 3'- coding region, as compared to variant 2. As a result of an insertion and frame shift, isoform 1 encoded by variant 1 has a cytoplasmic domain containing 130 amino acids, which is absent