

Product datasheet for **SC109816**

TAP2 (NM_000544) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAP2 (NM_000544) Human Untagged Clone
Tag:	Tag Free
Symbol:	TAP2
Synonyms:	ABC18; ABCB3; APT2; D6S217E; PSF-2; PSF2; RING11
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_000544, the custom clone sequence may differ by one or more nucleotides

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ATGCGGCTCCCTGACCTGAGACCCTGGACCTCCCTGCTGCTGGTGGACGCGGCTTTACTGTGGCTGCTTC
AGGGCCCTCTGGGACTTTGCTTCCTCAAGGGCTGCCAGGACTATGGCTGGAGGGGACCCCTGCGGTGGG
AGGGCTGTGGGGCTGCTAAAGCTAAGAGGGCTGCTGGGATTTGTGGGACACTGCTGCTCCCGCTCTGT
CTGGCCACCCCTGACTGTCTCCTGAGAGCCCTGGTCGCGGGGCTCACGTGCTCCCCAGCCAGAG
TCGCTTACGCCCCTTGGAGCTGGCTGCTGGTGGGTACGGGGCTGCGGGGCTCAGCTGGTCACTGTGGGC
TGTTCAGACCCTCCTGGAGCCAGGAGAAGGAGCAGGACCAGGTGAACAACAAAGTCTTGATGTGGAGG
CTGCTGAAGCTCTCCAGGCCGGACCTGCCTCTCCTCGTTGCCGCTTCTTCTTCTTGTCTTGTGTTT
TGGGTGAGACATTAATCCCTCACTATTCTGGTCGTGTGATTGACATCCTGGGAGGTGATTTTGACCCCA
TGCCTTGGCCAGTGCCATCTTCTCATGTGCCTTCTCCTTTGGCAGCTCACTGTCTGCAGGCTGCCGA
GGAGGCTGCTTACCTACACCATGTCTCGAATCAACTTGGGATCCGGGAGCAGCTTTTCTCCTCCCTGC
TGGCCAGGACCTCGGTTTCTTCCAGGAGACTAAGACAGGGGAGCTGAACCTCACGGCTGAGCTCGGATAC
CACCCTGATGAGTAACTGGCTTCTTTAAATGCCAATGTGCTCTTGCGAAGCCTGGTGAAGTGGTGGGG
CTGTATGGCTTCACTGCTCAGCATATCGCCTCGACTCACCTCCTTTCTCTGCTGCACATGCCCTTACAA
TAGCAGCGGAGAAGGTGTACAACACCCGCCATCAGGAAGTGTTCGGGAGATCCAGGATGCAAGTGGCCAG
GGCGGGGAGGTGGTGGCGGAAGCCGTTGGAGGGCTGCAGACCCTTCGCAGTTTTGGGGCCGAGGAGCAT
GAAGTCTGTGCTATAAAGAGGCCCTTGAACAATGTGGCAGCTGATTGGCGGAGAGACCTGGAACGCG
CCTTGTACCTGCTCGTAAGGAGGGTGTGCACTTGGGGTGCAGATGCTGATGCTGAGCTGTGGGCTGCA
GCAGATGCAGGATGGGGAGCTCACCCAGGGCAGCCTGCTTCTTATGATCTACCAGGAGAGCGTGGGG
AGCTATGTGCAGACCCTGGTATACATATATGGGGATATGCTCAGCAACGTGGGAGTGCAGAGAAGGTTT
TCTCTACATGGACCGACAGCCAAATCTGCCTTACCTGGCACGCTTGCCCCACCACTCTGCAGGGGGT
TGTGAAATTCCAAGACGTCTCCTTTCATATCCCAATCGCCCTGACAGGCCTGTGCTCAAGGGGCTGACG
TTTACCCTACGTCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG
CCCTGCTGCAGAACTGTACCAGCCACAGGGGACAGGTGCTGCTGGATGAAAAGCCCATCTCACAGTA
TGAACACTGCTACCTGCACAGCCAGGTGGTTTCAGTTGGCAGGAGCCTGTGCTGTTCTCCGGTTCTGTG
AGGAACAACATTGCTTATGGGCTGCAGAGCTGCGAAGATGATAAGGTGATGGCGGCTGCCAGGCTGCC
ACGCAGATGACTTCATCCAGGAAATGGAGCATGGAATATACACAGATGTAGGGGAGAAGGGAAGCCAGCT
GGCTGCGGGACAGAAACAACGTCTGGCCATTGCCCGGGCCCTTGTACGAGACCCGCGGTCTCATCCTG
GATGAGGCTACTAGTGCCCTAGATGTGCAGTGCAGCAGGCCCTGCAGGACTGGAATCCCGTGGGGATC
GCACAGTGTGGTATTGCTCACAGGCTGCAGGAGTTTACGCGGCCACCAGATCCTGGTGTCCAGGA
GGGCAAGCTGCAGAAGCTTGCCAGCTCCAGGAGGGACAGGACCTCTATCCCGCTGGTTCAGCAGCGG
CTGATGGACTGA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000544 unedited</p> <p>CACAATTTGTATACGACTCACTATAGGCGGCCCGCAATTCGCACGAGGCGGTAGCGAGG TTGGGAGAGACGGAGCGGACCTCAGCGCTGAAGCAGAAGCCCCGGAGCTGCGGTCTCCC CGCCGCGGCTGAGCCATGCGGCTCCCTGACCTGAGACCTGGACCTCCCTGCTGCTGGTG GACGCGGCTTTACTGTGGCTGCTCAGGGCCCTCTGGGGACTTTGCTTCTCAAGGGCTG CCAGGACTATGGCTGGAGGGGACCCTGCGGCTGGGAGGGCTGTGGGGCTGCTAAAGCTA AGAGGGTGTGGGATTTGTGGGGACACTGTGCTCCCGCTCTGTCTGGCCACCCCCCTG ACTGTCTCCCTGAGAGCCCTGGTCGCGGGGCTCACGTGCTCCCCAGCCAGATCGCT TCAGCCCTTGGAGCTGGCTGCTGGTGGGGTACGGGGCTGCGGGGCTCAGCTGGTCACTG TGGGCTGTTCTGAGCCCTCTGGAGCCCAGGAGAAGGAGCAGGACCAGGTGAACAACAAA GTCTTGATGTGGAGGCTGCTGAAGCTCTCCAGGCCGGACCTGCCTCTCCTCGTTGCCGC TTCTTCTCCTTGTCTTGTGTTTTGGGTGAGACATTAATCCCTCACTATTCTGGTCGT GTGATTGACATCCTGNGAGGTGATTTTGACCCCATGCCTTGCCAGTGCCATCTTCTTC ATGTGCCCTCTCCTTTGGCAGCTCACTGTCTGCANGCTGCCCGAGAGGCTGCTTACC TACACCATGTCTGAATCAACTGCNGATCCGGGAGCAGTTTTCTCCTCCTGTGCGC CCAGACCCTCGTTCTTCCCAGNAGACTAAGACAAGGGGAGCTGAACCTACGCCTGACC TCCGATACCAACCTGATGAAGTAACTGGCTTCCTTTA</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000544 unedited</p> <p>ACCGCGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTATTTTAAAAATATATGTA TTATGCCACAAAATACTCCTCATCACCAGGCAAAGCTCTAGTCACCAGGGAATTAAGTTT CCTGGACACAGACAGCCCCACCCACCCACCCACCTTCCACCCACAAAAGCACA CAGTGTCCAAATCTCCATCATGCCTGCAACTCAGGAACAGCTATCTGGCCGCACAGCTCT AGGGAAACTCAAAGCAGGAACAGCTCTGGTCTGGAGACGCCCCTGAGAAGAGGGCCCA GTATCCCTGGGGCCTCAGTCCATCAGCCGCTGCTGCACCAGGCGGGAATAAAGGTCTGT CCCTCCTAGAGCTGGGCAAGCTTTCTGCAGCTTGCCTCCTGGAACCCAGGATCTGGT GGGCGCGCTGAACTGTCTGCAGCCTGTGAGCAATCACCACCACTGTGCGATCCCCACGGG AATTCCATTCTGCAGGGCCTGCTTTCACTTGCCATTTAGGCACTAGTCCCCTCTCTCA CTATGATGACCTTCGGTTTCTCCATGGCCCGCCTTGTCCATACTTTGTTTTGTCCC GGCAATACATTGGCTCCCCTTCTCCGACCTCTGGGGTATTCCCATGCCCCATTCCC ATGAAAAATCGGCGTGGACATCTGGCCAGCGCCTCACCTTTTATTCTGTAATCTTCTTA CCCATAACATCGTTTTTCTACAATAACTCGTTATAATATATGTTTTTGGCAACTTAAAC CCTCGTTCTGCGCTTCCACGCTATTCCCGTNCATGGCTCTTGCCCTCTCCCCTCGTCC TCTTTGCTCTCATCTCCTCCACAGCTACCCTTTGTTTTCT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_000544
Insert Size:	2380 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_000544.3 , NP_000535.3
RefSeq Size:	5679 bp
RefSeq ORF:	2112 bp
Locus ID:	6891
UniProt ID:	Q03519
Cytogenetics:	6p21.32
Domains:	ABC_membrane, ABC_tran, AAA
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	ABC transporters, Antigen processing and presentation, Primary immunodeficiency
Gene Summary:	<p>The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. This gene is located 7 kb telomeric to gene family member ABCB2. The protein encoded by this gene is involved in antigen presentation. This protein forms a heterodimer with ABCB2 in order to transport peptides from the cytoplasm to the endoplasmic reticulum. Mutations in this gene may be associated with ankylosing spondylitis, insulin-dependent diabetes mellitus, and celiac disease. Alternative splicing of this gene produces products which differ in peptide selectivity and level of restoration of surface expression of MHC class I molecules. [provided by RefSeq, Feb 2014]</p> <p>Transcript Variant: This variant (1, B allele) represents the longer transcript and encodes the longest isoform (1). An allele (variant 1, A allele) exists in which a single nt change creates an internal stop codon, leading to a protein that is 17 aa shorter at the C-terminus.</p>