

Product datasheet for **RC217968**

Tapasin (TAPBP) (NM_003190) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tapasin (TAPBP) (NM_003190) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tapasin
Synonyms:	NGS17; TAPA; TPN; TPSN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC217968 representing NM_003190
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGTCCCTGTCTCTGCTCCTCGCTGTGGCTTTGGGCCTGGCGACCGCCTCTCAGCAGGACCCGCGG
 TGATCGAGTGTGGTTTCGTGGAGGATGCGAGCGGAAAGGGCCTGGCCAAGAGACCCGGTGCCTGCTGTT
 GCGCCAGGGACCGGGGAACCGCCGCCCGGACCTCGACCCTGAGCTCTATCTCAGTGTACACGAC
 CCCGCGGGCGCCCTCCAGGCTGCCTTCAGGCGGTATCCCCGGGGCGCCCCGCACCACTGCGAGATGA
 GCCGCTTCGTGCCTCTCCCCGCCTGCGAAATGGGCCAGCGCCTGACCCCGCGCAGAAGTCCCCGCG
 GGCCCTGGATGGGGCTTGGCTGATGGTCAGCATATCCAGCCAGTCTCAGCCTCTCCAGCCTCTTGCGA
 CCACAGCCAGAGCCTCAGCAGGAGCCTGTTCTCATCACCATGGCAACAGTGGTACTGACTGTCCTCACCC
 ACACCCCTGCCCTCGAGTGAGACTGGGACAAGATGCTCTGCTGGACTTGAGCTTTGCCTACATGCCCC
 CACCTCCGAGGCCGCTCATCTCTGGCTCCGGTCCCCCTCCCTTTGGGCTAGAGTGGCGACGCCAGCAC
 CTGGGTAAAGGACATCTGCTCCTGGCTGCAACTCCTGGGCTGAATGGCCAGATGCCAGCAGCCAAAGAAG
 GGGCCGTGGCATTGCTGCTTGGGATGATGATGAGCCATGGGGCCATGGACCGGAAATGGGACCTTCTG
 GCTGCCTAGAGTTCAACCCTTTCAGGAGGGCACCTATCTGGCCACCATACACCTGCCATACCTGCAAGGA
 CAGGTCACCCTGGAGCTTGTGTGTACAAACCCCAAGTGTCCCTGATGCCAGCAACCCTTGCACGGG
 CCGCCCCAGGGGAGGCACCCCGGAATTGCTCTGCCTTGTGTCCCACTTCAACCTTCTGGGGCCCTGGA
 GGTGGAGTGGGAACTCCGGGTGGCCAGGGGGCCGCTCTCAGAAGGCCGAGGGGAGAGGTGGCTCTCG
 GCCCTGCGCCACCATTCCGATGGCTCTGTCAGCCTCTCTGGGCACTTGCAGCCGCCCAAGTCAACCTG
 AGCAGCATGGGGCACGCTATGCTGTGCAATTCACCATCCAGCCTGCCTGCCTCGGGGCGCAGCGCTGA
 GGTCAACCCTGGAGGTAGCAGGTCTTTCAGGGCCCTCCCTTGAGGACAGCGTAGGCCCTTTTCTGCTGCC
 TTTCTTCTGCTTGGGCTTCTCAAGGCACTGGGCTGGGCTGCTGTCTACCTGTCCACCTGCAAGGATTCAA
 AGAAGAAAGCAGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217968 representing NM_003190
 Red=Cloning site Green=Tags(s)

MKSL S L L L A V A L G L A T A V S A G P A V I E C W F V E D A S G K L A K R P G A L L L R Q G P E P P P R P D L D P E L Y L S V H D
 P A G A L Q A A F R R Y P R G A P A P H C E M S R F V P L P A S A K W A S G L T P A Q N C P R A L D G A W L M V S I S S P V L S L S L L R
 P Q P E P Q Q E P V L I T M A T V V L T V L T H T P A P R V R L G Q D A L L D L S F A Y M P P T S E A A S S L A P G P P P F G L E W R R Q H
 L G K G H L L L A A T P G L N G Q M P A A Q E G A V A F A A W D D E P W G P W T G N G T F W L P R V Q P F Q E G T Y L A T I H L P Y L Q G
 Q V T L E L A V Y K P P K V S L M P A T L A R A A P G E A P P E L L C L V S H F Y P S G G L E V E W E L R G G P G G R S Q K A E G Q R W L S
 A L R H H S D G S V S L S G H L Q P P P V T T E Q H G A R Y A C R I H H P S L P A S G R S A E V T L E V A G L S G P S L E D S V G L F L S A
 F L L L G L F K A L G W A A V Y L S T C K D S K K K A E

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6708_h10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003190

ORF Size: 1344 bp

OTI Disclaimer: 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_003190.2](#)

RefSeq Size: 3629 bp

RefSeq ORF: 1347 bp

Locus ID: 6892

UniProt ID: [O15533](#)

Cytogenetics: 6p21.32

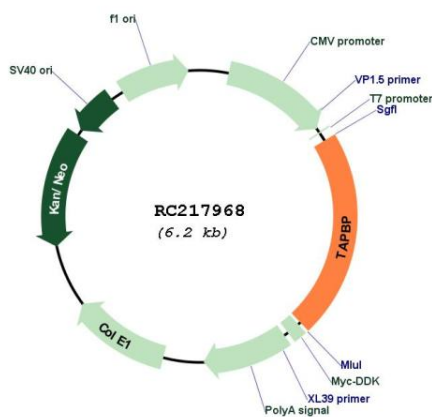
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Antigen processing and presentation

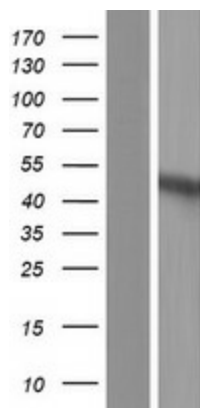
MW: 47.63 kDa

Gene Summary: This gene encodes a transmembrane glycoprotein which mediates interaction between newly assembled major histocompatibility complex (MHC) class I molecules and the transporter associated with antigen processing (TAP), which is required for the transport of antigenic peptides across the endoplasmic reticulum membrane. This interaction is essential for optimal peptide loading on the MHC class I molecule. Up to four complexes of MHC class I and this protein may be bound to a single TAP molecule. This protein contains a C-terminal double-lysine motif (KKKAE) known to maintain membrane proteins in the endoplasmic reticulum. This gene lies within the major histocompatibility complex on chromosome 6. Alternative splicing results in three transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

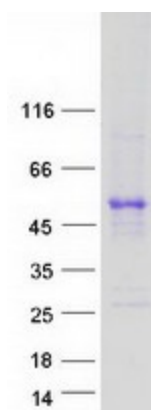
Product images:



Circular map for RC217968



Western blot validation of overexpression lysate (Cat# [LY406740]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC222140] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TAPBP protein (Cat# [TP317968]). The protein was produced from HEK293T cells transfected with TAPBP cDNA clone (Cat# RC217968) using MegaTran 2.0 (Cat# [TT210002]).