

Product datasheet for **RC222140**

Tapasin (TAPBP) (NM_172209) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tapasin (TAPBP) (NM_172209) 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)



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ORF Nucleotide Sequence:

>RC222140 representing NM_172209
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGTCCCTGTCTCTGCTCCTCGCTGTGGCTTTGGCCTGGCGACCGCCTCTCAGCAGGACCCGCGG
 TGATCGAGTGTTGGTTTCGTGGAGGATGCGAGCGGAAAGGGCCTGGCCAAGAGACCCGGTGCCTGCTGTT
 GCGCCAGGGACCGGGGAACCGCCGCCCGGACCTCGACCCTGAGCTCTATCTCAGTGACACGAC
 CCCGCGGGCGCCCTCCAGGCTGCCTTCAGGCGGTATCCCCGGGGCGCCCCGCACCACTGCGAGATGA
 GCCGCTTCGTGCCTCTCCCCGCTCTGCGAAATGGGCCAGCGCCTGACCCCGCGCAGAAGTCCCCGCG
 GGCCCTGGATGGGGCTTGGCTGATGGTCAGCATATCCAGCCAGTCTCAGCCTCTCCAGCCTCTTGCGA
 CCACAGCCAGAGCCTCAGCAGGAGCCTGTTCTCATCACCATGGCAACAGTGGTACTGACTGTCCTCACC
 ACACCCCTGCCCTCGAGTGAGACTGGGACAAGATGCTCTGCTGGACTTGAGCTTTGCCATACGCCCC
 CACCTCCGAGGCCGCTCATCTCGGCTCCGGTCCCCCTCCCTTTGGGCTAGAGTGGCGACGCCAGCAC
 CTGGGTAAAGGACATCTGCTCCTGGCTGCAACTCCTGGGCTGAATGGCCAGATGCCAGCAGCCAAAGAAG
 GGGCCGTGGCATTGCTGCTTGGGATGATGATGAGCCATGGGGCCATGGACCGGAAATGGGACCTCTG
 GCTGCCTAGAGTTCAACCCTTTCAGGAGGGCACCTATCTGGCCACCATACACTGCCATACCTGCAAGGA
 CAGGTCACCCTGGAGCTTGTGTGTACAAACCCCAAGTGTCCCTGATGCCAGCAACCCTTGCACGGG
 CCGCCCCAGGGGAGGCACCCCGGAATTGCTCTGCCTTGTGTCCCACTTCACTTCTGGGGCCCTGGA
 GGTGGAGTGGGAACTCCGGGTGGCCAGGGGGCCGCTCTCAGAAGGCCGAGGGGAGAGGTGGCTCTCG
 GCCCTGCGCCACCATTCCGATGGCTCTGTCAGCCTCTCTGGGCACTTGCAGCCGCCCCAGTCAACTG
 AGCAGCATGGGGCACGCTATGCTGTGCAATTCACCATCCAGCCTGCCGCTCGGGCGCGCAGCGCTGA
 GGTCAACCCTGGAGGTAGCAGGTCTTTCAGGGCCCTCCCTTGAGGACAGCGTAGGCCCTTTTCTGCTGCC
 TTTCTTCTGCTTGGGCTTCTCAAGGCACTGGGCTGGGCTGCTGTCTACCTGTCCACCTGCAAGGATTCAA
 AGAAGAAAGCAGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222140 representing NM_172209
 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_172209

ORF Size: 443 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 Size: 1410 bp

RefSeq ORF: 1086 bp

Locus ID: 6892

UniProt ID: [O15533](#)
Cytogenetics: 6p21.32

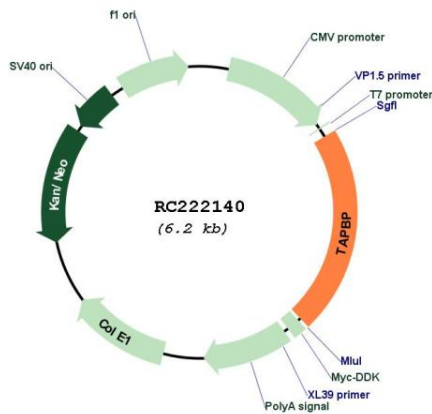
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Antigen processing and presentation

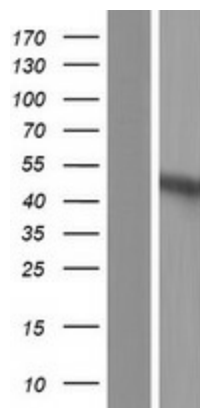
MW: 36.3 kDa

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 RC222140



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]).