

Product datasheet for **RC224744**

TIMM50 (NM_001001563) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	TIMM50
Synonyms:	MGCA9; TIM50; TIM50L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC224744 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCTCAGCTTTATCTCTGGCAATAAGTGTGATCCCTTCCTTCGCTGCGTCCTTTGCAGGGGCGGTG
 GCGCTCTGCAAGGCCCAAGGGGCGTGGTCCAGATGACTTTGAATCCCAGTTGTGCCCGCCAGGGTCAGC
 CAGGAGACTAGTCAGAAGCAAACGCGCCTGCGGCAATCCGCCCGATGCCTTTGGTCTCTCTCGGGCTTCC
 GTCCACCCGCCCTCCCCCGCTTTCCATTGGCTGTACCTCCGGCCCGGGCGGGCGAAGAGGGAGCGAG
 TGGGCGGGGCGCGTGGCGTCAGCGCAAGATGGCGGCCTGGCAGCGGTGTTCTCGCGCTTGCGAAGCGG
 GCTCCGGCTCGGCTCGCGGGGACTGTGCACGAGGTTGGCGACGCCGCCCGCGGGGCCCCAGATCAGGCC
 GCAGAGATCGGGAGCCGCGGGAGCACTAAGGCGCAAGGGCCACAGCAGCAGCCGGGCTCAGAGGGTCCCA
 GCTATGCCAAAAAAGTTGCGCTCTGGCTTGTGGGCTGCTTGAGCTGGTGGGACTGTGAGCGTCGTCTA
 TATCTTTGAAACAACCCGGTGGACGAAAATGGTGCCAAGATTCTGATGAGTTCGACAATGATCCAATT
 CTGGTACAGCAGTTGCGCCGGACATACAAATATTTCAAAGATTATAGACAGATGATCATCGAGCCACCA
 GCCCTTGCTTCTCCAGACCCTCTGCAGAACCGTACTACCAGCCACCCTACACGCTCGTTTTGGAGCT
 CACCGCGCTCCTTGTGATCCTGAGTGGTCTGGCCACTGGCTGGAGGTTAAGAAGCGCCAGGCATC
 GAGACCTTGTTCCAGCAGCTTGCCCTTTATATGAAATTGTGATCTTTACGTGAGAGACTGGCATGACTG
 CGTTTCCACTCATTGATAGTGTGACCCCCATGGCTTCATCTCTACCGCTATTCCGGGACGCCACAAG
 ATACATGGATGGACACCATGTAAGGATATTTGATGTCTGAATCGGGACCCAGCTCGAGTAGTAGTTGTG
 GACTGCAAGAAGGAAGCCTTCCGCCTGCAGCCCTATAACGGCGTTGCCCTGCGGCCCTGGGACGGCAACT
 CTGATGACCGGGTCTTGTGGATCTGTCTGCCTTCCTCAAGACCATTGCACTGAATGGTGTGGAGGACGT
 GCGAACCGTGCTGGAGCACTATGCCCTGGAGGATGACCCGCTGGCGGCTTTCAAACAGCGGCAAGCCGG
 CTAGAGCAGGAGGAGCAGCAGCGCTGGCCGAGCTCTCCAAGTCCAACAAGCAGAACCTCTTCTTGGCT
 CCCTACCGAGCCGCTTGTGGCTCGCTCCAACAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224744 protein sequence
 Red=Cloning site Green=Tags(s)

MASALSLGNKCDPFLRCVLCRGGGALQGPRGRGPDDFESQLSPPGSARRLVRSKRACGNPPDAFGLSRAS
 VHPPLPRVSIIGCTSGPGRKRERVGGAWRQRKMAASAASFVSRRLSGLRLGSRGLCTRLATPPRRAPDQA
 AEIGSRGSTKAQGPQQPGSEGPSYAKKVALWLAGLLGAGGTVSVVYIFGNNPVDENGAKIPDEFDNDPI
 LVQQLRRTYKYFKDYRQMIIEPTSPCLLPDPLQEPYYPYTLVLELTGVLLHPEWSLATGWRFKKRP
 ETLFQQLAPLYEIVIFTSETGMTAFPLIDSVDPHGFISYRLFRDATRYMDGHHVKDISCLNRDPARVVVV
 DCKKEAFRLQPYNGVALRPWDGNSDDRVLDDLAFKLTIALNGVEDVRTVLEHYALEDPLAAFKQRQSR
 LEQEEQQLAELSKSNKQNLFLGSLTSRLWPRSKQP

TRTRPLE**QKLISEEDLA**NDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6563_f11.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001001563

ORF Size: 1368 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001001563.3](#), [NP_001001563.1](#)

RefSeq Size: 2572 bp

RefSeq ORF: 1062 bp

Locus ID: 92609

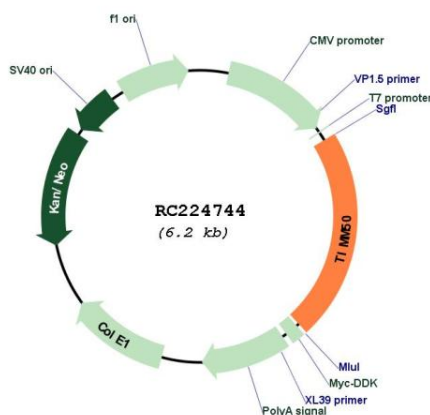
UniProt ID: Q3ZCQ8

Cytogenetics: 19q13.2

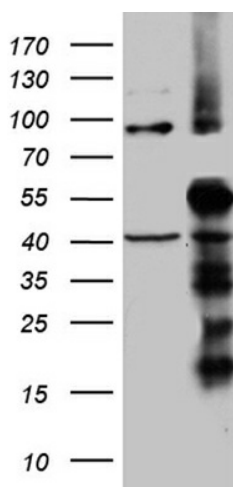
MW: 50.5 kDa

Gene Summary: This gene encodes a subunit of the TIM23 inner mitochondrial membrane translocase complex. The encoded protein functions as the receptor subunit that recognizes the mitochondrial targeting signal, or presequence, on protein cargo that is destined for the mitochondrial inner membrane and matrix. This protein may also play a role in maintaining the membrane permeability barrier, and knockdown of this gene in human cells results in the release of cytochrome c and apoptosis. [provided by RefSeq, Jul 2016]

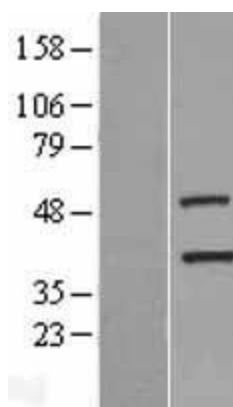
Product images:



Circular map for RC224744



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TIMM50 (Cat# RC224744, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TIMM50 (Cat# [TA811603])(1:2000). Positive lysates [LY424383] (100ug) and [LC424383] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424383]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224744 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).