

Product datasheet for **RC239369**

TMEM24 (C2CD2L) (NM_001290474) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM24 (C2CD2L) (NM_001290474) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMEM24
Synonyms:	DLNB23; TMEM24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC239369 representing NM_001290474
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCCGGGCTGGGGGACGCGGACGTGGGCTGGGCGGCCTTGCTGATCCTCTTCGCCGCCTCGCTGC
 TCACGGTGTTTCGCTGGCTGCTGCAATATGCCCGGGCTTGTGGCTGGCGCGGGCCCGCGGGGACCGGGG
 CCCGGGACCCGCCTTAGCCGGGAACCCGCGGGTTCCTGCGGGAGCTGGGCGTGTGGCGCTCGCTGCTG
 CGGCTGCGGGGACTCGGGCTGGCGCCGCGAGGAGCCAGGAGTCCGGGGCCTCTGGCGTCACTCTTCG
 CCTTCAAGTCTTTCGGGAGAAGTGGCAGCGGGCTTGGGTGCGAGCGTGAACGAGCAGGCTGCAGAAA
 CGGGAGCTCCATCCAATCGCCTTTGAGGAGGTGCCCCAACTCCACCCAGAGCCAGCATCAGTCATGTG
 ACCTGCGTAGACCAATCTGAGCATACCATGGTGTGCGTTGCCAGCTCTCTGCTGAGGAGGTGCGGTTCC
 CAGTCTCTGTGACCCAGCAGTCCCCGCTGCCGTCTCCATGGAGACCTACCACGTCACTCTGACACTGCC
 ACCAACACAGTTGGAAGTCAACCTGGAGGAAATCCCTGGTGGGGGCTGCTCATATCCTGGGCCTTCACT
 GATCGCCAGATCTCAGCCTAACGGTGCTTCCCAAGCTTCAGGCCAGGGAGAGAGGTGAAGAACAAGTGG
 AGCTCTCCACAATTGAGGAAGTATCAAGGATGCCATAGTCAGCACCCAGCCAGCCATGATGGTCAACCT
 CAGGGCTTGCTCTGCCCCAGGAGGCCTGGTACCCAGTGAGAAGCCACCCATGATGCCCCAGGCTCAGCCA
 GCCATCCCCAGACCTAACCGTTATTCTACGGCAGCTTCGGGCATCTCACTTGGGAAATGAGCTGGAAG
 GCACCGAGGAAGTGTGCTGTGTAGCTGAAGTGCACACCCATGCAGCAGAAGTGGACCAAGCCCGCGAG
 GGCTGGATCCGAGGTGGAGTGGACAGAAGACCTGGCACTGGATCTGGGCCCCAGAGCCGGGAGCTGACC
 CTCAAAGTGTGAGGAGCAGCAGCTGTGGAGACCCGAAGTCTAGGCCAGGCCACACTGCCTGTGGGCT
 CCCCCTCCAGACCACTGTCTCGAAGACAGTTGTGCCACTCACCCAGGGCCAGGAAAGCCCTGGGACC
 AGCAGCCACCATGGCAGTGGAGCTTCACTATGAGGAGGGCTCTCCCCGAACCTGGGTACTCCACCTCC
 TCCACTCCACGCCCCAGCATCACACCTACCAAGAAGATTGAGCTTGACCGGACCATCATGCCGATGGCA
 CCATTGTCAACACAGTCAACACTGTCCAGTCCCGGCCCGTATAGACGGCAAATTAGACTCCCCCTCCCG
 CTCCCCGTCCAAGGTGGAGGTGACCGAGAAGACGACAAGTGTGCTGAGTGAGAGCAGTGGCCCCAGCAAT
 ACCTCCCATAGCAGCAGCCGGGACAGCCACCTTCCAACGGCTTGGACCTGTAGCAGAGACAGCGATTCT
 GCCAGCTGACAGAGCCAGTGGGCGGTGGCCAAGAAGACACCCACCAAGCGCAGCACTCTCATCATCTC
 TGGTGTTCCTCAAGGTGCCATTGCTCAGGACGAGTTGGCGCTATCCCTGGGCTATGCGGCATCCCTGGAA
 GCCTCAGTGCAGGATGATGCAGGACCAGCGGAGGCCCTCTTACCTCCCTCAGACCCACCAGCCATGT
 CTCCAGGACCGCTAGATGCCCTCTCTAGTCCACAAAGTGTCCAGGAAGCAGACGAGACAACCCGTTCCGGA
 TATTTCTGAGAGGCCATCTGTGGATGATATTGAGTCGGAACGGGGTCCACTGGTGCCCTGGAGACCCGC
 AGCCTCAAGGATCACAAAGTGAAGTTTCTGCGCAGCGGCACTAAGCTCATCTTCCGCCGAGGCTAGGC
 AGAAGGAAGCTGGCCTGAGCCAATCACACGATGACCTCTCCAACGCAACGCCACGCCAGTGTCCGAAA
 GAAGGCCGGCAGCTTTTCTCGCCGCTTATCAAGCGCTTTTCTTCAAATCCAAACCAAGGCCAATGGT
 AACCCAGCCCCCAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239369 representing NM_001290474
 Red=Cloning site Green=Tags(s)

MDPGWGQRDVGWAALLILFAASLLTVFAWLLQYARGLWLARAGDRGPGPALAGEPAGSLRELGVWRSLL
 RLRATRAGAAEPEGVRGLLASLFAFKSFRENWQRAWVRALNEQACRNGSSIQIAFEEVPQLPPRASISHV
 TCVDQSEHTMVLRCQLSAEEVRFVSVTQQSPAAYSMETVHTVLTLPPTQLEVNLEEIPGEGLLISWAF
 DRPDLSTVLPLKLQARERGEEQVELSTIEELIKDAIVSTQPAMMVNLRACSAPGGLVPSEKPPMPQAQP
 AIPRPNRLFLRQLRASHLGNELEGTEELCCVAELDNPMQKWKTPARAGSEVEWTEDLALDLGPQSRELT
 LKVLRSSSCGDTELLGQATLPVGSPPSRPLSRRQLCPLTPGPGKALGPAATMAVELHYEEGSPRNLGTPTS
 STPRPSITPTKKIELDRTIMPDGTIVTTVTTVQSRPRIDGKLDSPSRSPSKVEVTEKTTTVLSESSGPSN
 TSHSSSRDShLSNGLDPVAETAIRQLTEPSGRVAKKTPTKRSTLIISGVSKVPIAQDELALSLGYAASLE
 ASVQDDAGTSGGPSSPPSDPPAMSPGPLDALSSPTSVQEADETRSDISERPSVDDIESETGSTGALETR
 SLKDHKVSFLRSGTKLIFRRRPQKEAGLSQSHDDL SNATATPSVRKKAGSF SRRLIKRFSFKSKPKANG
 NPSPQL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001290474

ORF Size: 2118 bp

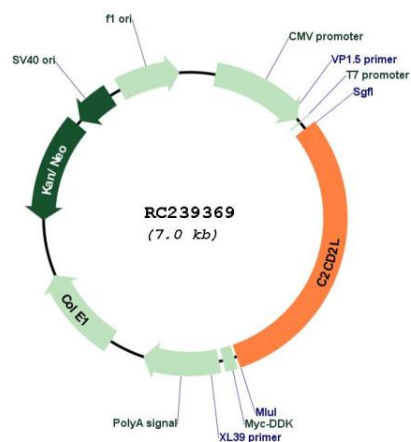
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_001290474.2</u>
RefSeq Size:	3399 bp
RefSeq ORF:	2121 bp
Locus ID:	9854
UniProt ID:	<u>O14523</u>
Cytogenetics:	11q23.3
Protein Families:	Transmembrane
MW:	76.6 kDa
Gene Summary:	Lipid-binding protein that transports phosphatidylinositol, the precursor of phosphatidylinositol 4,5-bisphosphate (PI(4,5)P2), from its site of synthesis in the endoplasmic reticulum to the cell membrane (PubMed:28209843). It thereby maintains the pool of cell membrane phosphoinositides, which are degraded during phospholipase C (PLC) signaling (PubMed:28209843). Plays a key role in the coordination of Ca(2+) and phosphoinositide signaling: localizes to sites of contact between the endoplasmic reticulum and the cell membrane, where it tethers the two bilayers (PubMed:28209843). In response to elevation of cytosolic Ca(2+), it is phosphorylated at its C-terminus and dissociates from the cell membrane, abolishing phosphatidylinositol transport to the cell membrane (PubMed:28209843). Positively regulates insulin secretion in response to glucose: phosphatidylinositol transfer to the cell membrane allows replenishment of PI(4,5)P2 pools and calcium channel opening, priming a new population of insulin granules (PubMed:28209843).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC239369