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Product datasheet for SC113519

TMEM111 (EMC3) (NM_018447) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM111 (EMC3) (NM_018447) Human Untagged Clone
Tag:	Tag Free
Symbol:	TMEM111
Synonyms:	POB; TMEM111
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC113519 sequence for NM_018447 edited (data generated by NextGen Sequencing)

ATGGCAGGGCCAGAACTGTTGCTCGACTCCAACATCCGCCTCTGGGTGGTCCTACCCATC
GTTATCATCACTTTCTTCGTAGGCATGATCCGCCACTACGTGTCCATCCTGCTGCAGAGC
GACAAGAAGCTCACCCAGGAACAAGTATCTGACAGTCAAGTCCTAATTCGAAGCAGAGTC
CTCAGGGAAAATGGAAAATACATTCCCAAACAGTCTTTCTTGACACGAAAATATTATTTC
AACAACCCAGAGGATGGATTTTTCAAAAAAACTAAACGGAAGGTAGTGCCACCTTCTCCT
ATGACTGATCCTACTATGTTGACAGACATGATGAAAGGGAATGTAACAAATGTCCTCCCT
ATGATTCTTATTGGTGGATGGATCAACATGACATTCTCAGGCTTTGTCACAACCAAGGTC
CCATTTCCACTGACCCTCCGTTTTAAGCCTATGTTACAGCAAGGAATCGAGCTACTCACA
TTAGATGCATCCTGGGTGAGTTCTGCATCCTGGTACTTCCTCAATGTATTTGGGCTTCGG
AGCATTTACTCTCTGATTCTGGGCCAAGATAATGCCGCTGACCAATCACGAATGATGCAG
GAGCAGATGACGGGAGCAGCCATGGCCATGCCCGCAGACACAAACAAAGCTTTCAAGACA
GAGTGGGAAGCTTTGGAGCTGACGGATCACCAGTGGGCACTAGATGATGTCGAAGAAGAG
CTCATGGCCAAAGACCTCCACTTCGAAGGCATGTTCAAAAAGGAATTACAGACCTCTATT
TTTTGA

Clone variation with respect to NM_018447.2

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018447 unedited
CGGTTCACATTTGTAAACGACTCACTATAGGCGGCCGCGCAATTCGCACGAGGGCCGGNA
GGCGAAGCCTGAAAAGAAGCAACTGTGTCCCCGGTAAAAGAGAAGCTCGCCCATTCCAGA
CTGGGAACCAGCTTTCAGTGAAGATGGCAGGGCCAGAACTGTTGCTCGACTCCAACATCC
GCCTCTGGGTGGTCCTACCCATCGTTATCATCACTTTCTTCGTAGGCATGATCCGCCACT
ACGTGTCCATCCTGCTGCAGAGCGACAAGAAGCTCACCCAGGAACAAGTATCTGACAGTC
AAGTCCTAATTCGAAGCAGAGTCCTCAGGGAAAATGGAAAATACATTCCCAAACAGTCTT
TCTTGACACGAAAATATTATTTCAACAACCCAGAGGATGGATTTTTCAAAAAAACTAAAC
GGAAGGTAGTGCCACCTTCTCCTATGACTGATCCTACTATGTTGACAGACATGATGAAAG
GGAATGTAACAAATGTCCTCCCTATGATTCTTATTGGTGGATGGATCAACATGACATTCT
CAGGCTTTGTCACAACCAAGGTCCCATTTCCACTGACCCTCCGTTTTAAGCCTATGTTAC
AGCAAGGAATCGAGCTACTCACATTAGATGCATCCTGGGTGAGTTCTGCATCCTGGTACT
TCCTCAATGTATTTGGGCTTCGGAGCATTTACTCTCTGATTCTGGGCCAAGAAATGCCGC
TGACCAATCACGAATGATGCAGGAGCAGATGACGGGAGCAGCCATGGCCATGCCCGCAGA
CACAAACAAAGCTTTTCAGACCGAGTGGGAAGCTTTGGAGCTGACGGACCACCAGTGGGC
ACTAATAGATGTCCTAAGAGAGCTCATGGCCAAAAGACCTTCACTTCAAGGGCATGTCAC
N

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_018447 unedited
AGGAGAGGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATCTGTTCAGGAAACAGCT
ATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTCAGATGGAGTTTTG
CTCTGTCGCCCAGGCTGGAGCGCAGTGGCACGATGTCAGCTCACTGCATCCTCCGCCTCC
TAGGTTTAAGCAGTTCTCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGTGCCCACCA
CCACGCCCGGCTAATTTTTTTTTGTATTTTTAGTAGAGATGGGGTTTCACCATCTTGGCC
AGGCTGATCTTGAACTCCTGATCTCGTGACCCACCCGCCTCAGCCTCCCAAAATCCTGGG
ATTACAGGCGTGAGCCACTGCGCCTGGCCAAGATTTTATATATTATCAGTAGCCTGAGGT
TTCCCCCTTTCTCTGACTTTCATTACTAGAGNCACCAGAAGGAACATTTACAACATTTTA
AAAATAACAAGTTGCCCAGCATACTCCTATTTCCTCTAGTTTCAAACATAAAGGGGAACC
CAGCCCAGACAAGAACAAGCCTTGCTGCATGCCTGCCAGCTCGTGCATCCTCCTTTTTAT
TTCAAGAGGTGCCCGCTCCAAACAAAGTTACAAGGGTTAGTGCAACTCCAAGTTCCTGAC
ACAGCTAATCCCTGCTCGGTCTTCAAAAATAGAGGTCTGTAATCCCTTTTGGACATGCCT
TCGAGGGGNAGGCTTTGCCATGAGCTCTCTTCGACATATCTAGTGCCACTGTGATCCGCA
ACTCCAAGCTCCCCTTTGCTGAAGCTTGTTTGGGTTGCGGCATGCCATGTTGCCCCGCAT
TGCTCTGATAATTGGATTGGCAGGGATTACCTGCCAAATTAAAAGTATGCTCCACCCCAT
CTGGGGATCCAGTGCCACCCCCAGAGCCTATGGAAGCCGTCCTGCGACTAGCTAACGGGC
ATGGATGGACTGTTGGAAACGAATTTGTGCCTCCAAGATTAGGGACTGTCT

Restriction Sites: NotI-NotI

ACCN: NM_018447

Insert Size: 1500 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:	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_018447.1, NP_060917.1
RefSeq Size:	1109 bp
RefSeq ORF:	786 bp
Locus ID:	55831
UniProt ID:	Q9P0I2
Cytogenetics:	3p25.3
Protein Families:	Transmembrane
Gene Summary:	Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the energy-independent insertion into endoplasmic reticulum membranes of newly synthesized membrane proteins (PubMed:30415835, PubMed:29809151, PubMed:29242231, PubMed:32459176, PubMed:32439656). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues (PubMed:30415835, PubMed:29809151, PubMed:29242231). Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices (PubMed:30415835, PubMed:29809151). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:29809151, PubMed:29242231). By mediating the proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology, with translocated N-terminus in the lumen of the ER, controls the topology of multi-pass membrane proteins like the G protein-coupled receptors (PubMed:30415835). By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes (Probable). [UniProtKB/Swiss-Prot Function]