

## Product datasheet for **SC324507**

### 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:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>&gt;OriGene sequence for NM_018447.1</p> <pre> CCCAGCTGAAGGCAGTAAGCTCGGCTCACAGTCGCAGGAGATTCTGGGGTACACGGGCA AAGGGGCTTGAGAAGGCCCGGAGGCCGAAGCCGAAGAGAAGCAACTGTGCCCGGAGAAGA GAAGCTCGCCATTCCAGACTGGGAACCCAGCTTTCAGTGAAGATGGCAGGGCCAGAAGT TTGCTCGACTCCAACATCCGCCTCTGGGTGGTCTTACCCATCGTTATCATCACTTTCTTC GTAGGCATGATCCGCCACTACGTGTCCATCCTGCTGCAGAGCGACAAGAAGCTCACCCAG GAACAAGTATCTGACAGTCAAGTCCTAATTCGAAGCAGAGTCCTCAGGGAAAATGGAAAA TACATTCGCCAACAGTCTTTCTTGACACGAAAATATTATTTCAACAACCCAGAGGATGGA TTTTTCAAAAAAACTAACGGAAGGTAGTGCCACCTTCTCCTATGACTGATCCTACTATG TTGACAGACATGATGAAAGGGAATGTAACAAATGTCCTCCCTATGATTCTTATTGGTGG TGGATCAACATGACATTCTCAGGCTTTGTCAACAACCAAGTCCCATTTCCACTGACCCTC CGTTTTAAGCCTATGTTACAGCAAGGAATCGAGCTACTCACATTAGATGCATCCTGGGTG AGTTCTGCATCCTGGTACTTCTCAATGTATTTGGGCTTCGGAGCATTTACTCTCTGATT CTGGGCCAAGATAATGCCGCTGACCAATCACGAATGATGCAGGAGCAGATGACGGGAGCA GCCATGGCCATGCCCGCAGACACAAACAAGCTTCAAGACAGAGTGGGAAGCTTTGGAG CTGACGGATCACCAGTGGGCACTAGATGATGTCGAAGAAGAGCTCATGGCCAAAGACCTC CACTTCGAAGGCATGTTCAAAAAGGAATTACAGACCTCTATTTTTGAAGACCGAGCAGG GATTAGCTGTGTCAGGAACCTGGAGTTGCACTTAACCTTGTAACTTTGTTGGAGCTGGC ACCTCTTGAATAAAAAAGGAGGATGCACGAAAAAAAAAAAAAAAAAAAAA </pre>
Restriction Sites:	Please inquire
ACCN:	NM_018447



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<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_018447.1</a></u> , <u><a href="#">NP_060917.1</a></u>
<b>RefSeq Size:</b>	1109 bp
<b>RefSeq ORF:</b>	786 bp
<b>Locus ID:</b>	55831
<b>UniProt ID:</b>	<u><a href="#">Q9P0I2</a></u>
<b>Cytogenetics:</b>	3p25.3
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	<p>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).</p> <p>[UniProtKB/Swiss-Prot Function]</p>