

## Product datasheet for RN211350

### Tmem30a (NM\_001004248) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem30a (NM_001004248) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Tmem30a
Synonyms:	MGC94262
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN211350 representing NM_001004248 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGATGAACTATAGCGGAAGGATGAGGTGGACGGCGGGCCACGGGTCTCCGGGGGGCGCCGCCA  
AGACCCGGAGCCGGATAACACGGCCTTCAAACAGCAACGGTTGCCTGCCTGGCAGCCCATCTCACCGC  
CGGCACGGTGCTGCCACCTTCTTCATCATCGGCCTCATCTTCATTCCCATCGGCATCGGCATCTTCGTC  
ACCTCCAACAACATCCGTGAGATCGAGGGCAATGTGTTTATGTATTATGGACTGTCTAATTTCTATCAA  
ACCATCGTCGTTATGTGAAATCCCGAGATGATAGCCAGTTAAACGGAGACCCTAGTGCTTTGCTTAATCC  
AAGTAAGGAATGTGAACCTATCGAAGAAATGAAGACAAACCGATTGCTCCATGTGGGGCCATTGCCAAC  
AGCATGTTAACGATACGTTAGAGTTGTTTCTGGTTGCCAATGAATCTGATCCCAAGCCTGTGCCAATTC  
TTTTGAAGAAAAAGGTATTGCTTGGTGGACAGATAAAAAATGTGAAATTCAGAAATCCACCTGGAAAAGA  
CAGCCTTCAAGAAAAGTTTAAAGATACAACAAAGCCAGTAAACTGGCATAAACCAGTATATGAGCTAGAC  
CCTGATGATGAAAGTAATAATGGATTCAAAATGAAGACTTTATTGTTGGATGCGTACTGCAGCTTTAC  
CTACTTTTCGTAAGTTATATCGTCTTATAGAGCGGACAGATGATTTACACCCAACACTACCAGCTGGACA  
GTACTATTTGAACATCACATAACAATTACCTGTACATTTTTTTGATGGACGAAAACGGATGATCTTGAGC  
ACTATTTTCATGGATGGGAGGAAAGAATCCATTTTTGGGAATTGCTTACATCACTATTGGATCCATCTCCT  
TCCTTCTGGGAGTTGACTGCTAGTAATTAATCATAAAATATAGAAACAGTAGTAATACTGCTGACATCAC  
CATT**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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<b>ACCN:</b>	NM_001004248
<b>Insert Size:</b>	987 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<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>	<a href="#">NM_001004248.1</a> , <a href="#">NP_001004248.1</a>
<b>RefSeq Size:</b>	1778 bp
<b>RefSeq ORF:</b>	987 bp
<b>Locus ID:</b>	300857
<b>UniProt ID:</b>	<a href="#">Q6AY41</a>
<b>Cytogenetics:</b>	8q31

**Gene Summary:**

Accessory component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids. Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. The beta subunit may assist in binding of the phospholipid substrate. Required for the proper folding, assembly and ER to Golgi exit of the ATP8A2:TMEM30A flippase complex. ATP8A2:TMEM30A may be involved in regulation of neurite outgrowth, and, reconstituted to liposomes, predominantly transports phosphatidylserine (PS) and to a lesser extent phosphatidylethanolamine (PE). The ATP8A1:TMEM30A flippase complex seems to play a role in regulation of cell migration probably involving flippase-mediated translocation of phosphatidylethanolamine (PE) at the plasma membrane. Required for the formation of the ATP8A2, ATP8B1 and ATP8B2 P-type ATPase intermediate phosphoenzymes. Involved in uptake of platelet-activating factor (PAF). Can also mediate the export of alpha subunits ATP8A1, ATP8B1, ATP8B2, ATP8B4, ATP10A, ATP10B, ATP10D, ATP11A, ATP11B and ATP11C from ER to other membrane localizations (By similarity).[UniProtKB/Swiss-Prot Function]