

## Product datasheet for **RC217257**

### Transmembrane protein 30A (TMEM30A) (NM\_018247) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Transmembrane protein 30A (TMEM30A) (NM_018247) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Transmembrane protein 30A
Synonyms:	C6orf67; CDC50A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217257 representing NM_018247 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGGCGATGAACATAACCGGAAGGATGAAGTGGACGGTGGGCCCCGTGTGCTCCGGGGGACCGCGA  
AGACTCGGAGACCGGATAACACGGCCTTCAAACAGCAACGGCTGCCAGCTTGGCAGCCCATCCTACGGC  
TGGCAGGTGCTACCTATTTCTTCATCATCGGTCTCATCTTCATTCCCATCGGCATTGGCATTGTTGTC  
ACCTCCAACAACATCCGCGAGATCGAGATTGATTATACCGGAACAGAGCCTTCCAGTCCCTGTAATAAAT  
GTTTATCTCCGGATGTGACACCTTGCTTTGTACCATTAACCTTCACACTGGAAAAGTCATTGAGGGCAA  
CGTGTTTATGTATTATGGACTGTCTAATTTCTATCAAAACCATCGTCGTTACGTGAAATCTCGAGATGAT  
AGTCAACTAAATGGAGATTCTAGTGCTTTGCTTAATCCCAGTAAGGAATGTGAACCTTATCGAAGAAATG  
AAGACAAACCAATTGCTCCTTGTTGGAGCTATTGCCAACAGCATGTTAATGATACATTAGAATTGTTTCT  
CATTGGCAATGATTCTTATCCTATACCTATCGCTTTGAAAAGAAAGGTATTGCTTGGTGGACAGATAAA  
AATGTGAAATTCAGAAATCCCCCTGGAGGAGACAACTGGAAGAACGATTTAAAGGTACAACAAAGCCTG  
TGAAGTGGCTTAACCAAGTTTACATGCTGGATTCTGACCCAGATAAATAGGATTCATAAATGAGGATTT  
TATTGTTTGGATGCGTACTGCAGCATTACCTACTTTTCGCAAGTTGTATCGTCTTATAGAAAGGAAAAGT  
GATTTACATCCAACATTACCAGCTGGCCGATACTCTTTGAATGTCACATACAATTACCCTGTACATTATT  
TTGATGGACGAAAACGGATGATCTTGAGCACTATTTTCATGGATGGGAGGAAAAAATCCATTTTGGGGAT  
TGCTTACATCGCTGTTGGATCCATCTCCTTCTCTGGGAGTTGTACTGCTAGTAATTAATCATAAATAT  
AGAAACAGTAGTAATACAGCTGACATTACCATT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC217257 representing NM\_018247  
 Red=Cloning site Green=Tags(s)

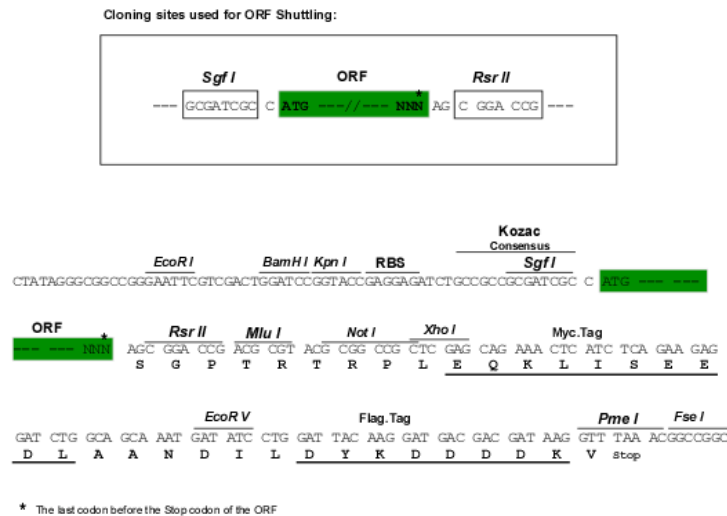
MAMNYNAKDEVDGGPPCAPGGTAKTRRPDNTAFKQQLPAWQPILTAGTVLPIFFIIGLIFIPIGIGIFV  
 TSNNIREIEIDYTGTEPSSPCNKCLSPDVTPCFCTINFLEKSFEGNVFMYGLSNFYQNHRRYVKS RDD  
 SQLNGDSSALLNPSKECEPYRRNEDKPIAPCGA IANSMFNDTLELFLIGNDSYIPIALKKKGIWWTDK  
 NVKFRNPPGGDNLEERFKGTTKPVNWLKPVYMLDSDPDNNGFINEDFIVWMRTAALPTFRKLYRLIERKS  
 DLHPTLPAGRYSLNVTYNYPVHYFDGRKRMILSTISWMGGKNPFLGIAYIAVGSISFLLGVVLLVINHKY  
 RNSNTADITI

SGP TRTRL EQKL ISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3539\\_c01.zip](https://cdn.origene.com/chromatograms/mg3539_c01.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_018247

**ORF Size:** 1083 bp

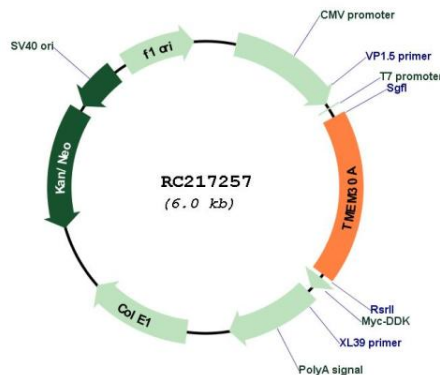
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

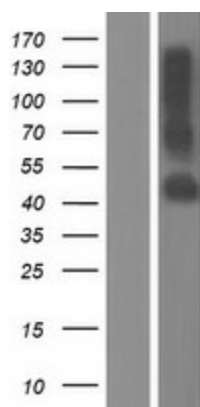
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, 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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_018247.4</a></u>
<b>RefSeq Size:</b>	4410 bp
<b>RefSeq ORF:</b>	1086 bp
<b>Locus ID:</b>	55754
<b>UniProt ID:</b>	<u><a href="#">Q9NV96</a></u>
<b>Cytogenetics:</b>	6q14.1
<b>Domains:</b>	CDC50
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	40.5 kDa

**Gene Summary:**

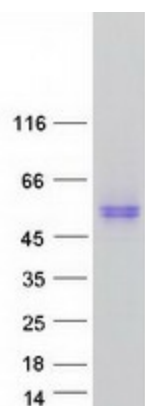
Accessory component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids. Phospholipid translocation seems also 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), synthetic drug alkylphospholipid edelfosine, and, probably in association with ATP8B1, of perfosine. Also mediate the export of alpha subunits ATP8A1, ATP8B1, ATP8B2, ATP8B4, ATP10A, ATP10B, ATP10D, ATP11A, ATP11B and ATP11C from the ER to other membrane localizations.[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for RC217257



Western blot validation of overexpression lysate (Cat# [LY413188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217257 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TMEM30A protein (Cat# [TP317257]). The protein was produced from HEK293T cells transfected with TMEM30A cDNA clone (Cat# RC217257) using MegaTran 2.0 (Cat# [TT210002]).