

## Product datasheet for **RG227922**

### Transmembrane protein 30A (TMEM30A) (NM\_001143958) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Transmembrane protein 30A (TMEM30A) (NM_001143958) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TMEM30A
Synonyms:	C6orf67; CDC50A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227922 representing NM_001143958 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGATGAACTATAACCGGAAGGATGAAGTGGACGGTGGGCCCGTGTGCTCCGGGGGGCACCGCGA  
AGACTCGGAGACCGGATAACACGGCCTTCAAACAGCAACGGCTGCCAGCTTGGCAGCCCATCCTTACGGC  
TGGCACGGTGCTACCTATTTTTCATCATCGGTCTCATCTTCATTCCCATCGGCATTGGCATTGTTGTC  
ACCTCCAACAACATCCGCGAGATCGAGGGCAACGTGTTTATGTATTATGGACTGTCTAATTTCTATCAA  
ACCATCGTCGTTACGTGAAATCTCGAGATGATAGTCAACTAAATGGAGATTCTAGTGCTTTGCTTAATCC  
CAGTAAGGAATGTGAACCTTATCGAAGAAATGAAGACAAACCAATTGCTCCTTGGGAGCTATTGCCAAC  
AGCATGTTAATGATACATTAGAATTGTTTCTCATTGGCAATGATTCTTATCCTATACCTATCGCTTTGA  
AAAAGAAAGGTATTGCTTGGTGGACAGATAAAATGTGAAATTCAGAAATCCCCCTGGAGGAGACAACT  
GGAAGAACGATTTAAAGGTACAACAAAGCCTGTGAACTGGCTTAAACCAGTTTACATGCTGGATTCTGAC  
CCAGATAAATAATGGATTCATAAATGAGGATTTTATTGTTGGATGCGTACTGCAGCATTACCTACTTTTC  
GCAAGTTGTATCGTCTTATAGAAAGGAAAAGTGATTTACATCCAACATTACCAGCTGGCCGATACTTTT  
GAATGTACATACAATTACCCTGTACATTATTTTGGATGGACGAAAACGGATGATCTTGAGCACTATTTCA  
TGGATGGGAGGAAAAATCCATTTTGGGATTGCTTACATCGCTGTTGGATCCATCTCCTTCTCTGG  
GAGTTGTACTGCTAGTAATTAATCATAAATATAGAAACAGTAGTAATACAGCTGACATTACCATT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG227922 representing NM\_001143958  
 Red=Cloning site Green=Tags(s)

MAMNYNAKDEVDGGPPCAPGGTAKTRRPDNTAFKQQLPAWQPILTAGTVLPIFFIIGLIFIPIGIGIFV  
 TSNNIREIEGNVFMYYGLSNFYQNHRRYVKSRRDSSQLNGDSSALLNPSKECEPYRRNEDKPIAPCGAIAN  
 SMFNDTLELFLIGNDSYPIPIALKKKGIAWWTDKNVFRNPPGGDNLEERFKGTTKPVNWLKPVYMLDSD  
 PDNNGFINEDFIVWMRTAALPTFRKLYRLIERKSDLHPTLPAGRYSLNVTYNYPVHYFDGRKRMILSTIS  
 WMGGKNPFLGIAYIAVGSISFLLGVVLLVINHKYRNSNTADITI

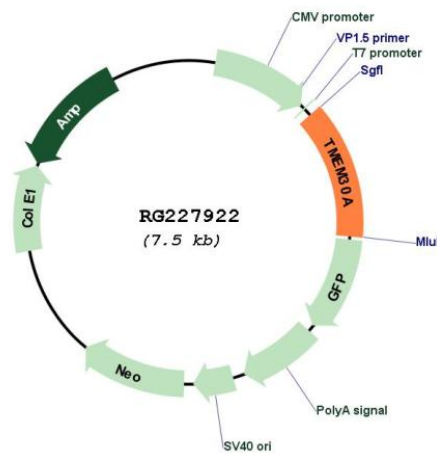
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001143958

**ORF Size:** 975 bp

<b>OTI Disclaimer:</b>	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>
<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>RefSeq:</b>	<a href="#">NM_001143958.2</a>
<b>RefSeq Size:</b>	4436 bp
<b>RefSeq ORF:</b>	978 bp
<b>Locus ID:</b>	55754
<b>UniProt ID:</b>	<a href="#">Q9NV96</a>
<b>Cytogenetics:</b>	6q14.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane

**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]