

Product datasheet for **RG202587**

TMEM177 (NM_030577) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	TMEM177
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG202587 representing NM_030577
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**C

ATGGCAGGTCCCCTGTGGCGGACCGCAGCATTTGTGCAGAGACACAGGACAGGCCTCTTGGTGGGTTCT
GTGCAGGCCTGTTTGGAGTTCAGTCTCGTACCACCTCTCCCGGATCCCGTGGTCCAATGGCTCTACCA
GTACTGGCCTCAGGGCCAGCCAGCTCCGCTCCCTCCACAGCTGCAGAGCCTCTTCCAAGAGGTGCTACAG
GACATAGGTGTTCTTCAGGCCATTGCTACAAGCCCTTCACCACCTTCACCTTCCAGCCTGTGAGTGCAG
GCTTCCCAAGACTCCCTGCTGGGGCTGTGGTGGGCATCCCTGCCAGTTTCTTGGGAGACCTAGTGATCAA
CACTAACCATCCCGTGGTCATACATGGGCATACAGTGGACTGGCGGAGCCAGCAGGCGCCCGGCTGAGA
GCTTCCCTGACCTTGTCCCGTGAAGCCAGAAAGTTCGCCTTGGCCAGGGAAGTGGTGTACCTGGAAGCA
GTACCACTGCCGTGCACGCCCTGCTGGCCCCAGCTTGCCTGGCAGGGACCTGGGCACTGGGCGTGGGTGC
CAAGTACACCCTGGGGCTCCATGCAGGCCCATGAATTTACGGGCTGCCTTCAGCTTGGTGGCAGCAGTG
GCAGGCTTTGTGGCTACGCCCTCTCCAGGATTCTCTCACTCATGCCGTGGAGTCTGGCTGGACCGCC
GCACGGCCTCCCTCTCTGCAGCCTATGCCTGTGGTGGAGTGGAGTTCTATGAGAAGCTTCTGTGGGCAA
CCTGGCCCTGCGCAGTCTCTTGGGCAAAGAGGGGAGAAGCTGTATACCCAGCGGGAACATCGTCCCC
AGACACTTGTTCGAATCAAACATTTACCTACACCACCCCGCGGACTCTGTGCTGCAGATGTGGAGGG
GGATGCTCAATCCGGGCGCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG202587 representing NM_030577
Red=Cloning site Green=Tags(s)

MAGPLWRTAAAFVQRHRTGLLVGSCAGLFGVPVSYHLFPDPVVQWLQYWPQGQPAPLPPQLQSLFQEVLQ
DIGVPSGHGCKPFTTFTFQPVSAAGFPRLPAGAVVGIPASFLGDLVINTNHPVVIHGHTVDWRSPAGARLR
ASLTLSREAQKFALAREVVYLESSTAVHALLAPACLAGTVALGVGAKYTLGLHAGPMNLRAAFSLVAAY
AGFVAYAFSQDSLTHAVESWLDRTASLSAAYACGGVEFYEKLLSGNLALRSLLGKEGKLYTPSGNIVP
RHLFRIKHLPYTTTRRDSVLQMRGMLNPGRS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

--- GAA GAA AGA GTT TAA ACGGCCGCCGCGGAGCT

- - E E R V Stop

ACCN: NM_030577

ORF Size: 933 bp

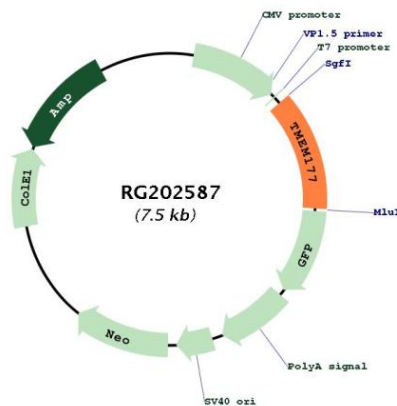
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_030577.1, NP_085054.1</u>
RefSeq Size:	1406 bp
RefSeq ORF:	936 bp
Locus ID:	80775
UniProt ID:	<u>Q53S58</u>
Cytogenetics:	2q14.2
Gene Summary:	Plays a role in the early steps of cytochrome c oxidase subunit II (MT-CO2/COX2) maturation and is required for the stabilization of COX20 and the newly synthesized MT-CO2/COX2 protein. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG202587