

Product datasheet for **MG214649**

Tmem199 (NM_199199) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: TurboGFP
Symbol: Tmem199
Synonyms: AI316787; AI848469; R74819
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG214649 representing NM_199199
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCTTCCTTGCTTGCCGGCGAACGACTGGTTCGCGCTTTGGGTCTGGCGGAGAACTGGAACGGG
AGCAGCTCCCCGGAAGCTGCGTGCCAGCTCGAGGCTGCTCTGGGAAAGAAACACGCGGGCAGTGATAA
TGCCACGGGACCCCGCGCCTGGTTTCATTCCTCATCCGAGATCTGCATCAGCACCTGAGAGAAAGA
AATTCAGGCTGTATCTTCATGAATCCTAGAAGGCAGTGACATCTACTTCCAGAGATTGTGAAGCCTC
CCCGGAATCCAGAGCTAGTTGCCCGGCTAGAGAAGATTAAAGATACAGCTAGCCAATGAGGAGTATAAGCG
GATCACTCGCAATGTCACCTGTGAGGATGCACAGTGTGGGGGACTCTCAGTGACCTGGGAAAGCAAGTG
AGGTCAGTGAAGGCTCTGGTCGTACCATCTCAACTTCATTATCACAGTGGCAGCTGCCTTTGTCTGCA
CTTACCTAGGAAGCCAGTATGTCTTACAGAAAATGGCCTCGAGAGTCTGGCTGCATTGATCGTTGCCCTC
GGTGGTAGGCTGCGAGAAGTACGTCATGGTAAGGGCAATGGAAGGAGAACTGGGCGAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG214649 representing NM_199199
Red=Cloning site Green=Tags(s)

MASSLLAGERLVRALPGGELEREQLPRKLRAQLEAALGKKHAGSDNATGPRRLVSFRLIRDLHQHLRER
NSRLYLHELLEGSDIYFPEIVKPPRNPPELVARLEKIKIQLANEYKRITRNVTCQDAQCQGGTLDLQKQV
RSVKALVVTIFNFIIITVAAAFVCTYLGSGYVFTMASRVLAALIVASVVGLELYVMVRAMEGELGEL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: NM_199199

ORF Size: 624 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: [NM_199199.3](#), [NP_954669.2](#)

RefSeq Size: 1353 bp

RefSeq ORF: 627 bp

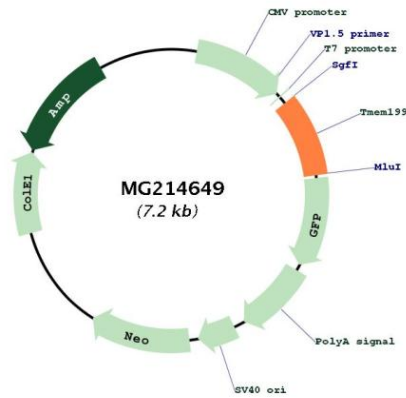
Locus ID: 195040

UniProt ID: [Q5SYH2](#)

Cytogenetics: 11 B5

Gene Summary: Accessory component of the proton-transporting vacuolar (V)-ATPase protein pump involved in intracellular iron homeostasis. In aerobic conditions, required for intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation. Necessary for endolysosomal acidification and lysosomal degradation (By similarity). May be involved in Golgi homeostasis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG214649