

Product datasheet for **RG204155**

TM7SF1 (GPR137B) (NM_003272) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TM7SF1 (GPR137B) (NM_003272) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TM7SF1
Synonyms:	TM7SF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204155 representing NM_003272 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGCCCGAGCGTCCCCGGCCGCGGGCAGCGCCCCGGCCCGATGGAGACCCCGCCGTGGGACCCAG
CCCGCAACGACTCGTGGCCGACGCTGACCCCGCCCGTGGCCCTACGTGAAGCTTGGCCTCACCGT
CGTCTACACCGTGTCTACGCGCTGCTTTCGTGTTTCATCTACGTGCAGCTCTGGCTGGTCTGCGTTAC
CGCCACAAGCGGCTCAGCTACCAGAGCGTCTTCTCTTCTCTGCTCTTCTGGGCTCCCTGCGGACCG
TCCTCTTCTCTTCTACTTCAAAGACTTCGTGGCGGCAATTCGCTCAGCCCTTCGTCTTCTGGCTGCT
CTACTGCTCCCTGTGTGCTGCAGTTTTTCACCCCTCACGCTGATGAACCTGTACTTCACGCAGGTGATT
TCAAAGCCAAGTCAAAATATTCTCCAGAATTACTCAAATACCGGTTGCCCTCTACCTGGCCTCCCTCT
TCATCAGCCTTGTTCCTGTGGTGAATTTAACCTGTGCTGTGCTGGTAAAGACGGGAAATGGGAGAG
GAAGGTTATCGTCTCTGTGCGAGTGGCCATTAATGACACGCTCTTCGTGCTGTGTGCCGTCTCTCTCC
ATCTGTCTTACAAAATCTAAGATGTCCTTAGCCAACATTTACTTGGAGTCCAAGGGCTCCTCCGTGT
GTCAAGTGACTGCCATCGGTGTCACCGTGATACTGCTTTACACCTCTCGGGCCTGCTACAACCTGTTTAT
CCTGTCAATTTCTCAGAACAAGAGCGTCCATTCCTTTGATTATGACTGGTACAATGTATCAGACCAGGCA
GATTTGAAGAATCAGCTGGGAGATGCTGGATACGTATTATTTGGAGTGGTATTGTTGGGAACTCT
TACCTACCACCTTAGTCGTTTATTCTTCCGAGTTAGAAATCCTACAAAGGACCTTACCAACCTGGAAT
GGTCCCCAGCCATGGATTCACTCCAGATCTTATTTCTTTGACAACCCTCGAAGATATGACAGTGATGAT
GACCTTGCTGGAACATTGCCCTCAGGGACTTCAGGGAGGTTTTGCTCCAGATTACTATGATTGGGGAC
AACAACTAACAGCTTCTGGCACAAGCAGGAACCTTGAAGACTCAACTTTGGATCCTGACAAACCAAG
CCTTGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204155 representing NM_003272
 Red=Cloning site Green=Tags(s)

MRPERPRRGSAPGPMETPPWDPARNDLPPPTLTPAVPPYVKLGLTVVYTVFYALLFVFIYVQLWLVRLY
 RHKRLSYQSVFLFLCLFWASLRTVLF SFYFKDFVAANSLSPFVFWLLYCFPVCLQFFTLTLMNLYFTQVI
 FKAKSKYSPELLKYRLPLYLASLFI SLVFLLVNLTCAVLVKTGNWERKVI VSVRVAINDTLFVLCVAVSLS
 ICLYKISKMSLANIYLESKGSSVCQVTAIGVTVILLYTSRACYNLFILSFQNKSVHSFDYDWINVSDQA
 DLKNQLGDAGYVLFVVLVFWELLPTTLVYFFRVRNPTKDLTNPGMVPSHGFSRSPSYFFDNPRRYDSDD
 DLAWNIA PQGLQGGFAPDYDYGQQTNSFLAQAGTLQDSTLDPDKPSLG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003272

ORF Size: 1197 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.

RefSeq: [NM_003272.4](#)

RefSeq Size: 1998 bp

RefSeq ORF: 1200 bp

Locus ID: 7107

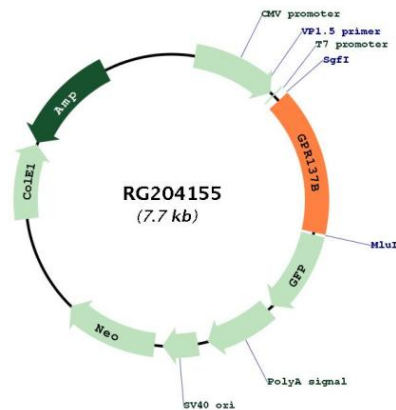
UniProt ID: [O60478](#)

Cytogenetics: 1q42.3

Protein Families: Druggable Genome, Transmembrane

Gene Summary: Lysosomal integral membrane protein that regulates the localization and activity of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids (PubMed:31036939). Interacts with Rag GTPases and increases the lysosomal localization and activity of Rag GTPases and thereby regulates mTORC1 translocation and activity in lysosome (PubMed:31036939). Involved in the regulation of lysosomal morphology and autophagy (PubMed:31036939).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG204155