

# **Product datasheet for RG231527**

URM1 (NM 001265582) Human Tagged ORF Clone

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# Product data:

**Product Type:** Expression Plasmids

**Product Name:** URM1 (NM\_001265582) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: URM1

Synonyms: C9orf74

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG231527 representing NM\_001265582
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTGCGCCCTTGTCAGTGGAGGTGGAGTTCGGAGGTGGTGCGGAGCTCCTGTTTGACGGTATTAAGA AACATCGAGTCACTTTGCCTGGACAGGAGGAACCCTGGGACATCCGGAACCTGCTCATCTGGATCAAGAA

GAATTTGCTAAAAGAGCGGCCAGAGTTGTTCATCCAGGGAGACAGCGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG231527 representing NM\_001265582

Red=Cloning site Green=Tags(s)

MAAPLSVEVEFGGGAELLFDGIKKHRVTLPGQEEPWDIRNLLIWIKKNLLKERPELFIQGDSV

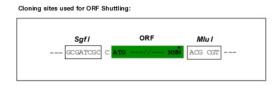
TRTRPLE - GFP Tag - V

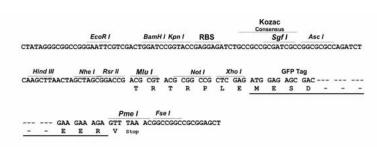
**Restriction Sites:** Sgfl-Mlul



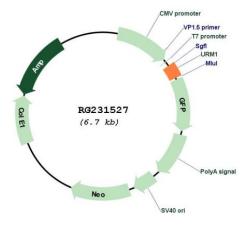


## **Cloning Scheme:**





# Plasmid Map:



**ACCN:** NM\_001265582

ORF Size: 189 bp

### URM1 (NM\_001265582) Human Tagged ORF Clone - RG231527

**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: <u>NM 001265582.1</u>, <u>NP 001252511.1</u>

 RefSeq Size:
 4369 bp

 RefSeq ORF:
 192 bp

 Locus ID:
 81605

 UniProt ID:
 Q9BTM9

 Cytogenetics:
 9q34.11

**Gene Summary:** Acts as a sulfur carrier required for 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of

cytosolic tRNA(Lys), tRNA(Glu) and tRNA(Gln). Serves as sulfur donor in tRNA 2-thiolation reaction by being thiocarboxylated (-COSH) at its C-terminus by MOCS3. The sulfur is then transferred to tRNA to form 2-thiolation of mcm(5)S(2)U. Also acts as a ubiquitin-like protein (UBL) that is covalently conjugated via an isopeptide bond to lysine residues of target proteins

such as MOCS3, ATPBD3, CTU2, USP15 and CAS. The thiocarboxylated form serves as substrate for conjugation and oxidative stress specifically induces the formation of UBL-

protein conjugates.[UniProtKB/Swiss-Prot Function]