

Product datasheet for **RG200879**

PUS1 (NM_025215) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PUS1 (NM_025215) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PUS1
Synonyms:	MLASA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200879 representing NM_025215 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCCTCCAGCTTCGCGCGCTGTTGGGAGCCTTCGGACGGTGGACCCTGCGCCTGGGACCGGTCCGT
CCTGCTCGCCGCGCATGGCCGGGAACGCGGAGCCGCCGCCGCGGAGCCGCATGCCCCAGGACCGGAG
GTCCTGCAGCGGCCGGCCGGGGCGACCGCTCTGGGAGGACGGAGAACATCCGGCGAAGAAGCTCAAG
AGCGGTGGCGACGAGGAGCGGCGGAGAAGCCGCCAAGCGGAAGATCGTGTCTCATGGCCTATTCGG
GCAAGGGTACCACGGCATGCAGAGGAATGTCGGGTCTCACAATTCAAAACAATTGAAGATGACTTGGT
GTCCGCCCTCGTCCGGTCAAGGCTATTCTGAAATCATGGTGAGGACATGAGGAAAATGTCTCCAG
CGTGCGCCCGGACAGACAAGGGTGTGTCCGACGCCGCGCAGGTGGTATCCCTGAAGGTGTGGCTGATTG
ACGACATTCTAGAAAAGATCAACAGCCACCTTCCCTCTCACATTCGGATTCTGGGACTGAAGCGGGTCAAC
GGCGGGTTTAACTCCAAGAAGATGTGATGCCAGGACCTATTGCTACCTGCTGCCACGTTTGCCTTT
GCGCACAAGGACCGGGACGTTTCAAGATGAGACCTACCGCTGAGCGCCGAGACGCTGCAGCAGGTCAACA
GGCTCCTGGCTGCTACAAGGGCACGCACAACCTCCACAATTTACCTCGCAGAAGGGGCCGAGGATCC
CAGTGCCTGCCGCTACATCCTGGAGATGACTGCGAGGAACCCCTTGTGCGGGAGGGCCTGGAGTTTGGC
GTGATCAGGGTGAAGGGCCAGAGCTTCATGATGCATCAGATCCGGAAGATGGTCGGCTGGTGGTGGCCA
TTGTGAAGGGTTATGCCCTGAGAGCGTGTGGAGCGCAGCTGGGCGCACAGAGAAGGTGGACGTGCCCAA
GGCGCCCGGACTCGCCTGGTCTGAGAGGGTGCACCTCGAGAAGTACAACCAGCGCTTTGGCAACGAT
GGGCTGCATGAGCCGCTGGACTGGGCGCAGGAGGAAGAAAGGTGCGAGCCTTCAAGGAGGACACATCT
ACCCACCATCATCGGCACCGAGCGGGACGAACGCTCCATGGCCAGTGGCTGAGCACCTTGCCCATCCA
CAACTTCAGTGCCACCGCTCTCACGGCAGGTGGCACGGCGCCAAGGTGCCAGTCCCCTGGAAGGCAGT
GAAGGGGACGGAGACTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online >](#)

Protein Sequence: >RG200879 representing NM_025215
 Red=Cloning site Green=Tags(s)

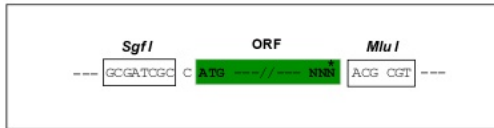
MGLQLRALLGAFGRWTLRLGPRPSCSPRMAGNAEPPPAGAACPQDRRSCSGRAGGDRVWEDGEHPAKKLLK
 SGGDEERREKPPKRKIVLLMAYSGKGYHGMQRNVGSSQFKTIEDDLVSALVRS GCIPENHGEDMRKMSFQ
 RCARTDKGVSAAGQVVS LKVWLID DILEKINSHLP SHIRILGLKRVTGGFNSKNRCDARTYCYLLPTFAF
 AHKDRDVQDETYRLSAETLQQVNRL LACYKGTHNFHNF TSQKGPQDP SACRYILEMYCEEFFVREGLEFA
 VIRVKGQSFMMHQIRKMGVLVVAIVKGYAPESV LERSWGTEKVDVPKAPGLGLVLERVHF EKYNQRF GND
 GLHEPLDWAQEEGKVA AFKEEHIYPTI IGTERDERSMAQWLSTLPIHNF SATALTAGGTGAKVPSPLEGS
 EGDGDTD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoR I BamH I Kpn I RBS Kozac Consensus Sgf I Asc I
 CTATAGGCGCGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGCGCGCCAGATCT

 Hind III Nhe I Rsr II Mlu I Not I Xho I GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC
 T R T R P L E M E S D - - -

 Pme I Fse I
 --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT
 - - E E R V stop

ACCN: NM_025215

ORF Size: 1281 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_025215.6](#)

RefSeq Size: 2047 bp

RefSeq ORF: 1284 bp

Locus ID: 80324

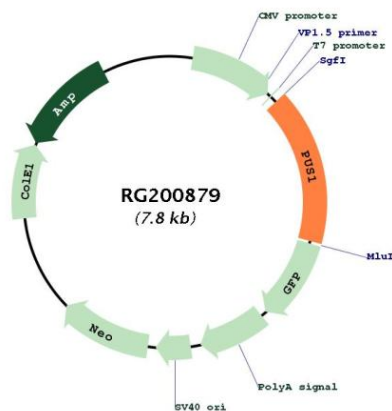
UniProt ID: [Q9Y606](#)

Cytogenetics: 12q24.33

Domains: PseudoU_synth_1

Gene Summary: This gene encodes a pseudouridine synthase that converts uridine to pseudouridine once it has been incorporated into an RNA molecule. The encoded enzyme may play an essential role in tRNA function and in stabilizing the secondary and tertiary structure of many RNAs. A mutation in this gene has been linked to mitochondrial myopathy and sideroblastic anemia. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Sep 2009]

Product images:



Circular map for RG200879