

Product datasheet for **RG202637**

PUS1 (NM_001002019) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PUS1
Synonyms:	MLASA1
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG202637 representing NM_001002019
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGCCGGGAACGCGGAGCCGCCGCCGCCGAGCCGATGCCCCAGGACCGGAGGTCTGCAGCGGCC
GGGCCGGGGCGACCGCTCTGGGAGGACGGAACATCCGGCGAAGAAGCTCAAGAGCGGTGGCGACGA
GGAGCGGGCGGAGAAGCCGCCAAGCGGAAGATCGTGCTGCTCATGGCTATTCGGGCAAGGGCTACCAC
GGCATGCAGAGGAATGTCGGGTCCTCACAAATCAAAACAATTGAAGATGACTTGGTGTCCGCCCTCGTCC
GGTCAGGCTGTATTCTGAAAATCATGGTGAGGACATGAGGAAAATGTCTTCCAGCGCTGCGCCCGGAC
AGACAAGGGTGTGTCCGAGCCGGCCAGGTGGTATCCCTGAAGGTGTGGCTGATTGACGACATTCTAGAA
AAGATCAACAGCCACCTTCCCTCTCACATTCGGATTCTGGGACTGAAGCGGGTACGGGCGGGTTAACT
CCAAGAACAGATGTGATGCCAGGACCTATTGCTACCTGCTGCCACGTTTGCCTTTGCGCACAAGGACCG
GGACGTTTCAAGATGAGACCTACCGCTGAGCGCCGAGACGCTGCAGCAGGTCAACAGGCTCCTGGCTGC
TACAAGGGCACGCACAATTCCACAATTTACCTCGCAGAAGGGGCGCAGGATCCCAGTGCCTGCCGCT
ACATCCTGGAGATGTACTGCGAGGAACCTTTGTGCGGGAGGGCTGGAGTTTGCCTGTATCAGGGTGAA
GGGCCAGAGCTTCATGATGCATCAGATCCGGAAGATGGTCGGCTGGTGGTGGCCATTGTGAAGGTTAT
GCCCCTGAGAGCGTGCTGGAGCGCAGCTGGGGCACAGAGAAGGTGGACGTGCCAAGGCGCCCGGACTCG
GCCTGTCTGAGAGGGTGCATTCGAGAAGTACAACCAGCGCTTTGGCAACGATGGGCTGCATGAGCC
GCTGGACTGGGCGCAGGAGGAAGGAAGGTGCGAGCCTTCAAGGAGGAGCACATCTACCCACCATCATC
GGCACCAGCGGGACGAACGCTCCATGGCCAGTGCTGAGCACCTTGCCCATCCACAATTCAGTGCCA
CCGCTCTACGGCAGGTGGCACGGCGCCAAGGTGCCAGTCCCCTGGAAGGCAGTGAAGGGGACGGAGA
CACTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA



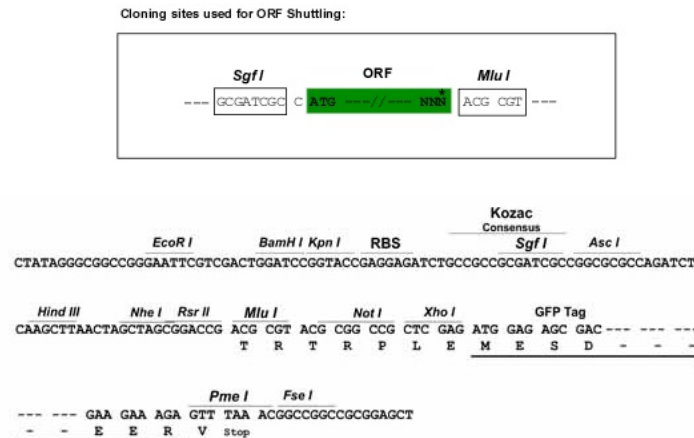
Protein Sequence: >RG202637 representing NM_001002019
Red=Cloning site Green=Tags(s)

MAGNAEPPPAACQDRRSCSGRAGGDRVWEDGEHPAKKLKSGGDEERREKPPKRKIVLLMAYSGKGYH
GMQRNVGSSQFKTIEDDLVSALVRSGCIPENHGDMRKMSFQRCARTDKGVSAAGQVVSLLKVLIDDILE
KINSHLPISHIRILGLKRVTTGGFNSKNRCDARTCYLLPTFAFAHKDRDVQDETYRLSAETLQQVNRLAC
YKGTNHNHFTSQKGPQDPSACRYILEMYCEEPFVREGLEFAVIRVKGQSFMMHQIRKMGVLVVAIVKGY
APESVLERSWGTEKVDVPAKPLGLVLERVHFKEYNQRFNDGLHEPLDWAQEEGKVAAFKEEHIYPTII
GTERDERSMAQWLSTLPIHNSATALTAGGTGAKVPSPLEGSEGDDTD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001002019

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001002019.3](#)

RefSeq Size: 1660 bp

RefSeq ORF: 1200 bp

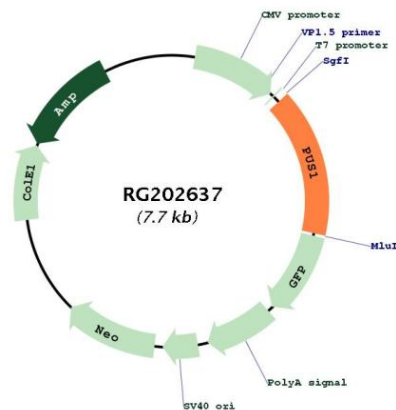
Locus ID: 80324

UniProt ID: [Q9Y606](#)

Cytogenetics: 12q24.33

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 RG202637