

Product datasheet for RC202637

PUS1 (NM_001002019) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PUS1 (NM_001002019) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PUS1
Synonyms:	MLASA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202637 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGGAACGCGGAGCCGCCGCCCGCGGAGCCGCATGCCCCAGGACCGGAGGTCTGCAGCGGCC
GGGCCGGGGGCGACCGCTCTGGGAGGACGGAACATCCGGCGAAGAAGCTCAAGAGCGGTGGCGACGA
GGAGCGGCGGAGAAGCCGCCAAAGCGGAAGATCGTGCTCATGGCCTATTCGGGCAAGGGCTACCAC
GGCATGCAGAGGAATGTCGGTCTCACAATTCAAAACAATTGAAGATGACTTGGTGTCCGCCCTCGTCC
GGTCAGGCTGTATTCCTGAAAATCATGGTGAGGACATGAGGAAAATGTCCTTCCAGCGCTGCGCCCGGAC
AGACAAGGGTGTGTCGCGAGCCGCCAGGTGGTATCCCTGAAGGTGTGGCTGATTGACGACATTCTAGAA
AAGATCAACAGCCACCTTCCCTCTCACATTTCGGATTCTGGGACTGAAGCGGGTACCGGGCGGTTAACT
CCAAGAACAGATGTGATGCCAGGACCTATTGCTACCTGCTGCCACGTTTGCCTTTCGCGACAAGGACCG
GGACGTTTCAGGATGAGACCTACCGCTGAGCGCCGAGACGCTGCAGCAGGTCAACAGGCTCCTGGCTGC
TACAAGGGCACGCACAATTCCACAATTCACCTCGCAGAAGGGGCCGAGGATCCCAGTGCCTGCCGCT
ACATCCTGGAGATGTACTGCGAGGAACCCTTTGTGCGGGAGGGCTGGAGTTTGGCGTGATCAGGGTGAA
GGGCCAGAGCTTCATGATGCATCAGATCCGGAAGATGGTCGGCTGGTGGTGGCCATTGTGAAGGGTTAT
GCCCTGAGAGCGTGTGGAGCGCAGCTGGGGCACAGAGAAGGTGGACGTGCCAAAGGCGCCCGGACTCG
GCCTGGTCTGGAGAGGGTGCCTTCGAGAAGTACAACACAGCGCTTTGGCAACGATGGGCTGCATGAGCC
GCTGGACTGGGGCAGGAGGAAGGAAAGTTCGAGCCTTCAAGGAGGAGCACATCTACCCACCATCATC
GGCACCGAGCGGGACGAACGCTCCATGGCCAGTGGCTGAGCACCTTGCCCATCCACAATTCAGTGCCA
CCGCTCTACGGCAGGTGGCACGGCGCCAAGGTGCCAGTCCCTGGAAGGCAGTGAAGGGGACGGAGA
CACTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202637 protein sequence
 Red=Cloning site Green=Tags(s)

MAGNAEPPAGAACPQDRRSCSGRAGGDRVWEDGEHPAKKLKSGGDEERREKPPKRKIVLLMAYSGKGYH
 GMQRNVGSSQFKTIEDDLVSALVRSGCIPENHGEDMRKMSFQRCARTDKGVSAAGQVSLKVWLIDDILE
 KINSHLP SHIRILGLKRVTTGGFNSKNRCDARTYCYLLPTFAFAHKDRDQDETYRLSAETLQQVNRLLAC
 YKGTNHNHNTSQKGPQDPSACRYILEMYCEEPFVREGLEFAVIRVKGQSFMMHQIRKMVGLVVAIVKGY
 APESVLSRWSWTEKVDVPAKPLGLVLERVHFEKYNQRFNDGLHEPLDWAQEEGKVAFAFKEEHIYPTII
 GTERDERSMAQWLSTLPIHNFSATALTAGGTGAKVPSPLEGSEGDGDTD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6391_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

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.

RefSeq: [NM_001002019.3](#)

RefSeq Size: 1637 bp

RefSeq ORF: 1200 bp

Locus ID: 80324

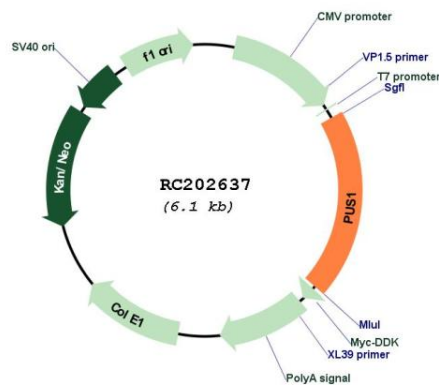
UniProt ID: [Q9Y606](#)

Cytogenetics: 12q24.33

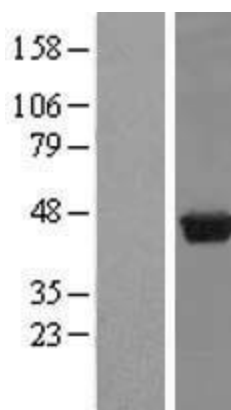
MW: 44.4 kDa

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]

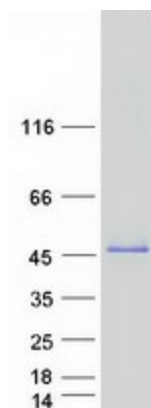
Product images:



Circular map for RC202637



Western blot validation of overexpression lysate (Cat# [LY424323]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC222753] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PUS1 protein (Cat# [TP302637]). The protein was produced from HEK293T cells transfected with PUS1 cDNA clone (Cat# RC202637) using MegaTran 2.0 (Cat# [TT210002]).