

Product datasheet for **RG203902**

PUS7 (NM_019042) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PUS7 (NM_019042) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PUS7
Synonyms:	IDDABS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG203902 representing NM_019042
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGATGACAGAAATGACTGGTGTGTCGCTGAAACGTGGGCACTGGTTGTCGAAGATAATGACAGTG
GAGTCCCAGTTGAAGAGACAAAAAACAGAAGCTGTCGGAATGCAGCCTAACCAAAGGTCAAGATGGGCT
ACAGAATGACTTTCTGTCCATCAGTGAAGACGTGCCTCGGCCTCCTGACTGTGACTGAGGAAAGGT
GAAAGAATTCTGAGGCTCAGTTGGAAGATGAGGAAGAAGAGGAGGAAGATGGACTTTCAGAGGAGTGCG
AGGAGGAGGAATCAGAGAGTTTTGCAGACATGATGAAGCATGGACTCACTGAGGCTGACGTAGGCATCAC
CAAGTTTGTGAGTTCTCATCAAGGGTTCTCGGGAATCTTAAAAGAAAGATACTCCGACTTCGTTGTTTAT
GAAATAGGAAAAGATGGACGGATCAGCCATTTGAATGACTTGTCCATTCCAGTGGATGAGGAGGACCCTT
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ACCACGCAGCTGGGAAAAAGGCTTTGGCAAATCCAAGAAAACATTCTTGGCCAAAATCTAGGGGAAGTTA
CTGCCACTTCGTAATATAAAGGAAAACAAAGACACCATGGATGCTATTAATGTAATCTCCTCAAACTTA
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AGGATAGAAGACTATGGACTAAAACCTGTTCCAGGGGACCTCGTTCTCAAAGGAGCCACAGCCACCTATA
TTGAGGAAGATGATGTTAATAATTACTCTATCCATGATGTGTAATGCCCTTGCCTGGTTTCGATGTTAT
CTACCCAAAGCATAAAAATCAAGAAGCCTACAGGGAAATGCTCACAGCTGACAATCTTGATATTGACAAC
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CCTTCTACTTACGCCACCATGGCCATTCGAGAAGTGCTAAAAATGGATACCAGTATCAAGAACCAGACGC
AGCTGAATACAACCTGGCTTCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203902 representing NM_019042
 Red=Cloning site Green=Tags(s)

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MEMTEMTGVS LKRGALVVEDNDSGVPVEETKKQKLSECSLTKGQDGLQNDFLSISEDVPRPPDVTSTGKG
GKNSEAQLEDEEEEEEDGLSECEEESESFADMMKHGLTEADVGITKVFSSHQGFSGILKERYSDFVVH
EIGKDGRI SHLNDLSIPVDEEDPSEDI FTVLTAE EKQRLEELQLFKNKETSVAIEVIEDTKEKRTIIHQ A
IKSLFPGLETKTEDREGKKYIVAYHAAGKKALANPRKHSWPKSRGSYCHFVLYKENKDTMDAINVLSKYL
RVKPNIFSYMGTKDKRAITVQEIAVLKITAQRLAHLNKCLMNFKLGNF SYQKNPLKLGELQGNHFTVVLR
NITGTDDQVQQAMNSLKEIGFINYYGMQRF GTTAVPTYQVGRAILQNSWTEVMDLILKPRSGAEKG YLVK
CREEWAKTKDPTAALRKLPVKRCVEGQLLRGLSKYGMKNI VSAFGIIPRNNRLMYIHSYQSYVWNM VSK
RIEDYGLKPVPGDLVLKGATATYIEEDDVNYSIHDVVMPLPGFDVIYPKHKIQEAYREMLTADNLDIDN
MRHKIRDYSLSGAYRKIIIRPQNVSWEVVAYDDPKIPLFNTDVDNLEGKTPPVFASEGKYRALKMDFSLP
PSTYATMAIREVLKMDTSIKNQTLNNTWLR
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_019042

ORF Size: 1983 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_019042.3](#), [NP_061915.2](#)

RefSeq Size: 3484 bp

RefSeq ORF: 1986 bp

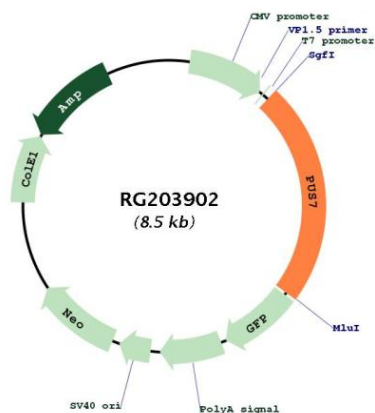
Locus ID: 54517

UniProt ID: [Q96PZ0](#)

Cytogenetics: 7q22.3

Gene Summary: Pseudouridylate synthase that catalyzes pseudouridylation of RNAs (PubMed:28073919, PubMed:29628141). Acts as a regulator of protein synthesis in embryonic stem cells by mediating pseudouridylation of RNA fragments derived from tRNAs (tRFs): pseudouridylated tRFs inhibit translation by targeting the translation initiation complex (PubMed:29628141). Also catalyzes pseudouridylation of mRNAs: mediates pseudouridylation of mRNAs with the consensus sequence 5'-UGUAG-3' (PubMed:28073919). In addition to mRNAs and tRNAs, binds other types of RNAs, such as snRNAs, Y RNAs and vault RNAs, suggesting that it can catalyze pseudouridylation of many RNA types (PubMed:29628141).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG203902