

Product datasheet for **SC113305**

PUS7 (NM_019042) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PUS7 (NM_019042) Human Untagged Clone
Tag:	Tag Free
Symbol:	PUS7
Synonyms:	IDDABS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_019042, the custom clone sequence may differ by one or more nucleotides

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ATGGAGATGACAGAAATGACTGGTGTGTCGCTGAAACGTGGGGCACTGGTTGTCGAAGATAATGACAGTG
GAGTCCCAGTTGAAGAGACAAAAAACAGAAGCTGTCGGAATGCAGTCTAACCAAAGGTCAAGATGGGCT
ACAGAATGACTTTCTGTCCATCAGTGAAGACGTGCCTCGCCTCCTGACACTGTGACTGTTGGAAAGGT
GGAAAGAATTCTGAGGCTCAGTTGGAAGATGAGGAAGAAGAGGAGGAAGATGGACTTTCAGAGGAGTGCG
AGGAGGAGGAATCAGAGAGTTTTGCAGACATGATGAAGCATGGACTCACTGAGGCTGACGTAGGCATCAC
CAAGTTTTGTGAGTTCTCATCAAGGGTTCTCGGGAATCTTAAAAGAAAGATACTCCGACTTCGTTGTTTCAT
GAAATAGGAAAAGATGGACGGATCAGCCATTTGAATGACTTGTCCATTCCAGTGGATGAGGAGGACCCTT
CAGAAGACATATTTACAGTTTTGACAGCTGAAGAAAAGCAGCGATTGGAAGAGCTCCAGCTGTTCAAAAA
TAAGGAAACCAGTGTGCCATTGAGGTTATCGAGGACACCAAAGAGAAAAGAACCATCATCCATCAGGCT
ATCAAATCTCTGTTTCCAGGATTAGAGACAAAAACAGAGGATAGGGAGGGGAAGAATAACATTGTAGCCT
ACCACGCAGCTGGAAAAAGGCTTTGGCAAATCCAAGAAAACATCTTGGCCAAAATCTAGGGGAAGTTA
CTGCCACTTCGTAATATAAAGGAAAACAAAGACACCATGGATGCTATTAAATGTACTCTCCAAATACTTA
AGAGTCAAGCCAAATATATTCTCTACATGGGAACCAAAGATAAAAAGGGCTATAACAGTTCAAGAAATTG
CTGTTCTCAAAAATAACTGCACAAAGACTTGCCACCTGAATAAGTGCTTGATGAACCTTAAAGCTAGGGAA
TTTCAGCTATCAAAAAACCCACTGAAATTTGGGAGAGCTTCAAGGAAACCACTTCACTGTTGTTCTCAGA
AATATAACAGGAACTGATGACCAAGTACAGCAAGCTATGAACTCTCTCAAGGAGATTGGATTTATTAAGT
ACTATGGAATGCAAGATTTGGAACCACAGCTGTCCCTACGATCAGGTTGGAAGAGCTATACTACAAAA
TTCTGGACAGAAGTCAAGGATTTAATATTGAAACCCCGCTCTGGAGCTGAAAAGGGCTACTTGGTTAAA
TGCAGAGAAGAATGGGCAAGACCAAAGACCAACTGCTGCCCTCAGAAAACCTACCTGCAAAAAGTGTG
TGGAAAGGCAGCTGCTTCGAGGACTTTCAAAATATGGAATGAAGAATATAGTCTCTGCATTTGGCATAAT
ACCCAGAAATAATCGCTTAATGTATATTATAGCTACCAAAGCTATGTGTGGAATAACATGGTAAGCAAG
AGGATAGAAGACTATGGACTAAAACCTGTTCCAGGGGACCTCGTTCTCAAAGGAGCCACAGCCACCTATA
TTGAGGAAGATGATGTTAATAATTACTCTATCCATGATGTGGAATGCCCTTGCCTGGTTTCGATGTTAT
CTACCCAAAGCATAAAAATCAAGAAGCCTACAGGGAAATGCTCACAGCTGACAATCTTGATATTGACAAC
ATGAGACACAAAATTCGAGATTATTCCTTGTGAGGGCCCTACCGAAAGATCATTATTCGCTCTCAGAAATG
TTAGCTGGGAAGTCGTTGCATATGATGATCCAAAATTCCTTTTCAACACAGATGTGGACAACCTAGA
AGGGAAGACACCACAGTTTTTGTCTTGAAGGCAAAATACAGGGCTCTGAAAATGGATTTTTCTCTACCC
CCTTCTACTTACGCCACCATGGCCATTCGAGAAGTGCTAAAATGGATACCAAGTATCAAGAACCCAGACGC
AGCTGAATACAACCTGGCTTCGCTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_019042 unedited

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NGTAATATCACCCGCCCGTTGNCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATA
TAAGCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGG
CCGCGAATTCGGCACGAGGCAAAGACCAAAGACCAACTGCTGCCCTCAGAAAACCTCT
GTCAAAAGGTGTGTGGAAGGGCAGCTGCTTCGAGGACTTTCAAAATATGGAATGAAGAAT
ATAGTCTCTGCATTTGGCATAATACCCAGAAATAATCGCTTAATGTATATTCATAGCTAC
CAAAGCTATGTGTGGAATAACATGGTAAGCAAGAGGATAGAAGACTATGGACTAAAACCT
GTTCTAGGGGACCTCGTTCTCAAAGGAGCCACAGCCACCTATATTGAGGAAGATGATGTT
AATAATTACTCTATCCATGATGTGGAATGCCCTTGCCTGGTTTCGATGTTATCTACCCA
AAGCATAAAAATCAAGAAGCCTACAGGGAAATGCTCACAGCTGACAATCTTGATATTGAC
AACATGAGACACAAAATTCGAGATTATTCTTGTGAGGGCCCTACCGAAAGATCATTATT
CGTCTCAGAATGTTAGCTGGGAAGTCGTTGCATATGATGATCCAAAATTCCTTTTCT
AACACAGATGTGGACAACCTAGAAGGGAAGACACCACAGTTNTTGTCTTGAAGGCAAA
TACAGGGCTCTGAAAATGGATTTTTCTCTACCCCTTCTACTTACGCCACCATGGCCATT
CGGAGAGTGCTAAANATGGATACCAAGTATCAAGAACCCAGACGCAGCTGAATACAACCTGG
CTTCGCTGAGCAGTACCCTGTCCACAGATTAANACGTACACCAGTGTGTTGCTTCTGGCT
CCTGTGCATTN
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_019042 unedited TNANNGATCGATTTTTTTTTTTTTTTTTTTTGGAGGTTTTAAAAATATTTATTACATTTGTTT CTAGAAATCATAGAAAAAAAATGATCAATTTTGATATACAACCTTAGAAAGGCATATTT ATCCTTTACACCAGAGAAGTTTATGCAATGCCAGACATGGAAATACCAAAGCCACTGGT GACAAAGGGTAAACGCTACTGATAGAAGAAAGCCTTGCCATTTTATAGTTTTCTTCTC TACCATTATTTATTTTGGACAAATACCAGTCCAGTGGAAAGAGTTCTGAACATAAAAGG CACCTAGAGTAAAAATTAGACCTTAACCTAATAAAAACAGCTGTACACGTTTACATCAAGAA AAAAAACCCGGCCAGCAGCTCATGCCTGTAATCCCAGGAGTTAGCCTCGGCAACATG GCCAAACCCCGTCTCTCAAAAAAATCAAAAAATCAGCTAGGCGTGGTGGTGCAGCCT GACTCCAGCTACTTAAGAGGCTGAGGTGGGAGAGTCACTGGAGCCTGGGAGGTGCAAG CTGCANTGCAAGATTGAAAAATGCAAGATTGCACTGCAATCCACCCTGTGCTACAGAGTG AGATCCTGTCTCGCAAAAAAATAAAAAATAATGGGGCCTATTAATGCCACGTTCTGC CAAGGGATTGATAATAAATGCCAAACCCCGCCACAAAAAGGCTATAATGCTTGCT GGATCTAGTAAACCAGGAAATGGACATACTTTTTTGTATAAATTTGGAGAAGTC TTTATTTTTCCAGCCCCAGGAGTCCCGGTTTATTTTTGGGGGGGCGAGCCTTCAAATT TTTTTTC
Restriction Sites:	NotI-NotI
ACCN:	NM_019042
Insert Size:	2000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_019042.2, NP_061915.1</u>
RefSeq Size:	3484 bp
RefSeq ORF:	618 bp
Locus ID:	54517
UniProt ID:	<u>Q96PZ0</u>
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]

Transcript Variant: This variant (2) differs in the 5' UTR and lacks an in-frame exon in the 5' coding region, compared to variant 1. The encoded isoform (b) is shorter than isoform a. Both variants 2 and 3 encode the same isoform.