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Product datasheet for SC105512

PUS7 (AK091283) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PUS7 (AK091283) Human Untagged Clone
Tag:	Tag Free
Symbol:	PUS7
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for AK091283, the custom clone sequence may differ by one or more nucleotides

ATGGAGATGACAGAAATGACTGGTGTGTCGCTGAAACGTGGGGCACTGGTTGTCGAAGATAATGACAGTG
GAGTCCCAGTTGAAGAGACAAAAAAACAGAAGCTGTCGGAATGCAGTCTAACCAAAGGTCAAGATGGGCT
ACAGAATGACTTTCTGTCCATCAGTGAAGACGTGCCTCGGCCTCCTGACACTGTCAGTACTGGGAAAGGT
GGAAAGAATTCTGAGGCTCAGTTGGAAGATGAGGAAGAAGAGGAGGAAGATGGACTTTCAGAGGAGTGCG
AGGAGGAGGAATCAGAGAGTTTTGCAGACATGATGAAGCATGGACTCACTGAGGCTGACGTAGGCATCAC
CAAGTTTGTGAGTTCTCATCAAGGGTTCTCGGGAATCTTAAAAGAAAGATACTCCGACTTCGTTGTTCAT
GAAATAGGAAAAGATGGACGGATCAGCCATTTGAATGACTTGTCCATTCCAGTGGATGAGGAGGACCCTT
CAGAAGACATATTTACAGTTTTGACAGCTGAAGAAAAGCAGCGATTGGAAGAGCTCCAGCTGTTCAAAAA
TAAGGAAACCAGTGTTGCCATTGAGGTTATCGAGGACACCAAAGAGAAAAGAACCATCATCCATCAGGCT
AACAAATCTCTGTTTCCAGGATTAGAGACAAAAACAGAGGATAGGGAGGGGAAGAAATACATTGTAGCCT
ACCACGCAGCTGGGAAAAAGGCTTTGGCAAATCCAAGAAAACATTCTTGGCCAAAATCTAGGGGAAGTTA
CTGCCACTTCGTACTATATAAGGAAAACAAAGACACCATGGATGCTATTAATGCACTCTCCAAATACTTA
AGAGTCAAGCCAAATATATTCTCCTACATGGGAACCAAAGATAAAAGGGCTATAACAGTTCAAGAAATTG
CTGTTCTCAAAATAACTGCACAAAGACTTGCCCACCTGAATAAGTGCTTGATGAACTTTAAGCTAGGGAA
TTTCAGCTATCAAAAAAACCCACTGAAATTGGGAGAGCTTCAAGGAAACCACTTCACTGTTGTTCTCAGA
AATATAACAGGAACTGATGACCAAGTACAGCAAGCTATGAACTCTCTCAAGGAGATTGGATTTATTAACT
ACTATGGAATGCAAAGATTTGGAACCACAGCTGTCCCTACGTATCAGGTTGGAAGAGCTATACTACAAAA
TTCCTGGACAGAAGTCATGGATTTAATATTGAAACCCCGCTCTGGAGCTGAAAAGGGCTACTTGGTTAAA
TGCAGAGAAGAATGGGCAAAGACCAAAGACCCAACTGCTGCCCTCAGAAAACTACCTGTCAAAAGGTGTG
TGGAAGGGCAGCTGCTTCGAGGACTTTCAAAATATGGAATGAAGAATATAGTCTCTGCATTTGGCATAAT
ACCCAGAAATAATCGCTTAATGTATATTCATAGCTACCAAAGCTATGTGTGGAATAACATGGTAAGCAAG
AGGATAGAAGACTATGGACTAAAACCTGTTCCAGGGGACCTCGTTCTCAAAGGAGCCACAGCCACCTATA
TTGAGGAAGATGATGTTAATAATTACTCTATCCATGATGTGGTAATGCCCTTGCCTGGTTTCGATGTTAT
CTACCCAAAGCATAAAATTCAAGAAGCCTACAGGGAAATGCTCACAGCTGACAATCTTGATATTGACAAC
ATGAGACACAAAATTCGAGATTATTCCTTGTCAGGGGCCTACCGAAAGATCATTATTCGTCCTCAGAATG
TTAGCTGGGAAGTCGTTGCATATGATGATCCCAAAATTCCACTTTTCAACACAGATGTGGACAACCTAGA
AGGGAAGACACCACCAGTTTTTGCTTCTGAAGGCAAATACAGGGCTCTGAAAATGGATTTTTCTCTACCC
CCTTCTACTTACGCCACCATGGCCATTCGAGAAGTGCTAAAAATGGATACCAGTATCAAGAACCAGACGC
AGCTGAATACAACCTGGCTTCGCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for AK091283 unedited
GGGGGGGGGNNNNNTTTCCTCCNNNNNNGGTTTANAATTGTAAAACCACTTTCTATAGGC
GGCCGCGNAATTCGCACGAGTCGGCTGNGACGCATCTGGTCCTCCGCGCGGAAAGCGCTG
CTTTTGCCTGGCCGCCCTAGCCGCTGGCTCATCCAAGTGGCCTTCGCCGCTCTCTTGCGT
CCCAACCAGAGCGCTGGCCACCTCGCCGCCCAGCTCACGCCGCGCCCGCGCTCCCAGGCT
CCGGGTTTTCTTAAATGTTTTCTTGGAGCCTTAAAGATGGAGATGACAGAAATGACTGGT
GTGTCGCTGAAACGTGGGGCACTGGTTGTCGAAGATAATGACAGTGGAGTCCCAGTTGAA
GAGACAAAAAAACAGAAGCTGTCGGAATGCAGTCTAACCAAAGGTCAAGATGGGCTACAG
AATGACTTTCTGTCCATCAGTGAAGACGTGCCTCGGCCTCCTGACACTGTCAGTACTGGG
AAAGGTGGAAAGAATTCTGAGGCTCAGTTGGAAGATGAGGAAGAAGAGGAGGAAGATGGA
CTTTCAGAGGAGTGCGAGGAGGAGGAATCANAGAGTTTTGCAGACATGATGAAGCATGGA
CTCACTGAGGCTGACGTAGGCATCACCAAGTTTGTGAGTTCTCATCAAGGGTTCTCGGGA
ATCTTAAAAGAAAGATACTCCGACTTCGTTGTTCATGAAATAGGAAAAGATGGACGGATC
AGCCATTTGAATGACTTGTCCATTCCAGTGGATGAGGAGGACCCTTCAGAGACATATTTA
CAGNTTTGACAGCTGAAGAAAAGCAGCGATTGGAAGAGCTNCAGCTGTTCAAAAATAAGG
AACCAGTGTTGCCATTGAGAGTCAAGCCAATATATTCTCCTACATGGGAACCAAGATAAA
GGGNCTATACAGNTCAGNAANNATGCTGTCTCAAAATACTGCACAAGACTTGCCCACTGA
ATAAGTGCTTGATGACCTTTAGCTAGGNAAATTCAGCTTCAAAN

3' Read Nucleotide Sequence:

>OriGene 3' read for AK091283 unedited
NCGTCACTATNACCGCGGCCCAATCTATGATCGGTTTTTTTTTTTTTTTTTGAGATTTTA
AAAATATTTATTACATTTGTTTCTAGAAATCATAGAAAATAAAAATTGATACAATTTTGA
TATACAACTTTAGAAAGGCATATTTATCCTTTCACACCAGAGAAGTTTATGCAATGCCAG
ACATGGAAATACCAAAGCCACTGGTGACAAAGGGTAAACGCTACTGATAGAAGAAAGCCT
TGTCCATTTTTATAGTTTTCTTCTCTACCATTATTTATTTTTGAGCAAATACCAGTCCAG
TGGAAAGAGTTCTGAACATAAAAGGCACCTAGAGTAAAAATTAGACCTTAACTAATAAAA
CAGCTGTACACGTTTACATCAAGAAAAAAAAACCCGGCCAGCACAGCTCATGCCTGTAAT
CCCAGGAGTTAGCCTCGGCAACATGGCCAAACCCCCGTCTCTACAAAAAAATACAAAAAT
CAGCTAGGCGTGGTGGTGCGCGCCTGTACTCCCAGCTACTTATGAGGCTGANGTGGGAGA
GTCACTGGAGCCTGGGAGGTCGAGGCTGCAGTGCAAGATTGANGATTGCANGATTGCACT
GCAATCCAGCCTGTGCTACAGAGTGAGATCCTGTCTCGNAAAANAAAATAAAAAAATTAA
ATGGGCCTATCAATGGCACGTTCCTGCAAAGCATTGATAATATAAATGCCAAAGCCACCG
CAACCAAAAAGTCTATAATGGCTGGCCTGAATCTAGTACATAAGCAGGATAATGGACATC
ACTTTTTGGTTATAAATTTGGAGATGGCCTATTATTTCAGTCAGCATGAGTACCGTATTT
ATATTGGGGGTTGGCAACTCTAAATATTTATCCCTAC

Restriction Sites: NotI-NotI

ACCN: AK091283

Insert Size: 3000 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:	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:	AK091283.1, BAG52324.1
RefSeq Size:	2691 bp
RefSeq ORF:	2691 bp
Locus ID:	54517
Cytogenetics:	7q22.3
Domains:	UPF0024
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]