

Product datasheet for **SC114799**

SMG7 (NM_014837) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMG7 (NM_014837) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMG7
Synonyms:	EST1C, SMG-7, SGA56M, C1orf16, FLJ23717, KIAA0250
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_014837, the custom clone sequence may differ by one or more nucleotides

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ATGAGCCTGCAGAGCGCGCAGTACCTCCGGCAGGCAGAAAGTCTGAAGGCTGACATGACAGATTCTAAGC
TGGGTCCAGCTGAAGTCTGGACATCCAGCAGGCTCTGCAGGACCTGTACCAGAAAATGCTAGTTACCGA
TTTGAATACGCTTTAGACAAGAAAGTAGAACAGGATCTCTGGAATCACGCCTTTAAGAATCAGATCACA
ACACTGCAAGGCCAGGCAAAAGAATCGAGCAAATCCGAATCGGAGTGAAGTTCAGGCAAACCTTTCTCTGT
TCCTAGAGGCAGCTAGTGGCTTCTATACTCAGTTATTACAAGAACTGTGTACAGTATTTAATGTAGATTT
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GCCTTATAATCAGTTGGCTATCTTAGCTTCTTCCAAAGGAGACCATCTGACCACAATTTTCTACTACTGC
AGAAGCATTGCTGTGAAGTTCCTTTCCAGCTGCCTCCACTAATCTGCAAAAAGCACTTTCTAAAGCAC
TGGAAAGCCGAGATGAGGTGAAAACCAAGTGGGGTGTCTGACTTCATCAAGGCCTTTATTAATTTCCA
CGGTCACTGTGTACCTGAGTAAGAGCTTGGAAAAGTTGAGCCCTCTCGAGAGAAAATTGGAAGAACAGTTT
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GACCCAGGGTCTTTCAGGAGGCAGTGGTGGATGAAAGACAGTACATTTGGCCCTGGTTGATTTCTCTTCT
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CAGGGGACAAAAGAAGGCCAGCAACGACGAATACGACAGCAACGCTTGATCTCTATAGGCAAATGGATTGC
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TGACACAGGAGAGAAGCCAGTGGTTACCTTCAAAGAAAACATTAAGACACGAGAAGTGAACAGAGACCAA
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GCCTGTGGCATTCTATGGGCTCAGGTTACACCTTCCAGCTGGTGTCTGTGCCAGGAACCTTTCTT
CAGCCTACAGCTCACTCTCCAGCAGGAAACCAGGTGCAAGCTGGGAAACAGTCCCACATTCCTTACAGCC
AGCAACGGCCCTCTGGACCAGGGCCAATGAACCAGGGACCTCAACAATCACAGCCACCTTCCAGCAACC
CCTTACATCTTTACCAGCTCAGCCAACAGCACAGTCTACAAGCCAGCTGCAGGTTCAAGCTCAACTCAG
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GTTGGCATCAGGCCAGCACTCCGAGTGGCACCTGGACAGGCCATGGCCCTTCCATGGAGGATTCTCTGC
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CAGCTGTTAATGCAGCAGAAGCAGAAACAGCAACGGGGACAAGGCACCATGAACCTCCACACTGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_014837 unedited
 CCCCATGTCCAGGAATTTGTCCTACGAACACTACTATAGGGCGGCCGCTGAATCGGCACGA
 GGTCTAGCTCCTGTTCTATATCTGCCAGCACTGCCTCGTCCCCTTGGAGACTTGCTCGA
 ACAGAAACCAGACCAGCCAGGCAGAGTCTACTATAGGCATGCAGCTCAGCTTGTCCCCT
 CCAATGGTCAGCCTTATAATCAGTTGGCTATCTTAGCTTCTTCCAAGGAGACCATCTGA
 CCACAATTTTCTACTACTGCAGAAGCATTGCTGTGAAGTCCCTTTCCCAGCTGCCTCCA
 CTAATCTGCAAAAAGCACTTTCTAAAGCACTGGAAAGCCGAGATGAGGTGAAAACCAAGT
 GGGGTGTTTCTGACTTTCATCAAGGCCTTTATTAATTCCACGGTATGTGTACCTGAGTA
 AGAGCTTGGAAAAGTTGAGCCCTCTTCGAGAGAAATTGGAAGAACAGTTTAAAGAGCTGC
 TATTCCAAAAAGCTTTCAACTCTCAGCAGTTAGTTCATGTCACTGCATTAACCTGTTTC
 AACTTCATCACCTTCGTGACTTTAGCAATGAAACCGAGCAGCACACTTATAGCCAAGATG
 AGCAGCTATGTTGGACACAGTTGCTGGCCCTCTTATGTCTTTTCTTGGCATCCTGTGCA
 AGTGTCTCTACAGAATGAGTCTCAGGAGGAGTCTACAATGCCTATCCTCTTCCAGCAG
 TCAAGGTCTCCATGGACTGGCTAAGACTCAGACCCAGGGTCTTTCAGGAGGCAGTGGTGG
 ATGAAAGACAGTACATTTGGCCCTGGTTGACTTCTCTTCTGCATAGTTTCCATCCCATG
 AAGAGGACCTCTCACGTATTAGTGCACACCCTCCAGAGGAGNTTGAATACAGGCATT
 TTTGGC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_014837 unedited
 TTTAGCTCTGGACCCGCGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTGTTC
 ACTGCGAACATTTTCGTGCACACTCAGCGGGCTGGTGAATACTTACACCCTCTTGACAGC
 GAGAAACAGAAAAGAGGGCTGCCACCTGCAGGGGACTGTGTGGCCAGTCTGCAAACCC
 AACATGCCATGGTTTATGGAGCCTTCATCCCAGGTTGCCACTTTGGCCTCAGTGTGGAG
 GGTTCATGGTGCCTTGTCCCCGTTGCTGTTTCTGCTTCTGCTGCATTAACAGCTGCCTCA
 GAGCAGAAGGTCCAGGATGCATCATGGAACCTGGACCAGATAGACTTTAGGCTTTCCATGA
 GGACAGCAGAGGAATCCTCCATGGAAGGGCCATGGCCTGTCCAGGTGCCACTCGGAGTGC
 TGGCCTGATGCCAACTGCTCTCAGAGGATGACGTTGCTGAGAGATAATCAATGCCAAACC
 CACCCATGGCTGGCTTATCAGTTTTCCACCGATCTGCAGTCTTCTATCCCTGTTATCTG
 GAGTCCCAATGGGTCCAAAATTGGAGAATGGAACAGAATTATGGTTGTGTGTTGGAGGAG
 AGCTGGGTAGGCTGCTTGGGTTAGAGGAATGAGGAGACTGGCTGGCTGGTGTGAATGAT
 CTGAACTGGCAGGAAGTATGGAGACCAGGAGTCCCTTCAAAGGGAAACAGAGATGTT
 TCCTGGGGGGCCATTGAGGGACTGAGTTCTGCTTTGGAGCTGGATGTCANGTTTTTCCCA
 TATACCTCATTGAACATACTATTATTNTGGTATCTTTCCTGATTGAGAGAGATNNCGTGA
 GGNACANGNANAGAGATGAATGTGACATGAGCTCTGAGGGCTTCTCCATAAGATTAATAA
 NNGCTCGTCAGAAGAGAGCGAGACCCCCACAGAGCGGTAAGATCAGAA

Restriction Sites:

NotI-NotI

ACCN:

NM_014837

Insert Size:

3550 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: [NM_014837.1](#), [NP_055652.1](#)

RefSeq Size: 5648 bp

RefSeq ORF: 2409 bp

Locus ID: 9887

Cytogenetics: 1q25.3

Gene Summary: This gene encodes a protein that is essential for nonsense-mediated mRNA decay (NMD); a process whereby transcripts with premature termination codons are targeted for rapid degradation by a mRNA decay complex. The mRNA decay complex consists, in part, of this protein along with proteins SMG5 and UPF1. The N-terminal domain of this protein is thought to mediate its association with SMG5 or UPF1 while the C-terminal domain interacts with the mRNA decay complex. This protein may therefore couple changes in UPF1 phosphorylation state to the degradation of NMD-candidate transcripts. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Aug 2011]