

Product datasheet for SC315216

SMG7 (NM_173156) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMG7 (NM_173156) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMG7
Synonyms:	C1orf16; EST1C; SGA56M
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_173156 edited
 ATGAGCCTGCAGAGCGCGCAGTACCTCCGGCAGGCAGAAGTCTGAAGGCTGACATGACA
 GATTCTAAGCTGGGTCCAGCTGAAGTCTGGACATCCAGGCAGGCTCTGCAGGACCTGTAC
 CAGAAAATGCTAGTTACCGATTTGGAATACGCTTTAGACAAGAAAAGTAGAACAGGATCTC
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 AATCCGAATCGGAGTGAAGTTCAGGCCAACCTTTCTGTTCCTAGAGGCAGCTAGTGGC
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 GTGAAGTCTTCCCAATTGGGAATTATCAGCAATAAACAGACGCATACCAGCGCCATAGTG
 AAGCCACAGTCTAGCTCCTGTTCTATATCTGCCAGCACTGCCTCGTCCACCTTGGAGAC
 ATTGCTCGATACAGAAACCAGACCAGCCAGGCAGAGTCTACTATAGGCATGCAGCTCAG
 CTTGTCCCTCCAATGGTCAGCCTTATAATCAGTTGGCTATCTTAGCTTCTTCCAAGGA
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 AAAGAGAACCTCATTCTGCAAGAAACATCTGTGATAGAGTCGCTGGCTGCAGATGGGAGC



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CAGCAGAAGCAGAAACAGCAACGGGGACAAGGCACCATGAACCTCCACACTGA

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- Restriction Sites:** Please inquire
- ACCN:** NM_173156
- Insert Size:** 6200 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_173156.1](#), [NP_775179.1](#)

RefSeq Size: 5846 bp

RefSeq ORF: 3414 bp

Locus ID: 9887

UniProt ID: [Q92540](#)

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]
Transcript Variant: This variant (1) encodes isoform 1.