

## Product datasheet for RC206137

### SMG5 (NM\_015327) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMG5 (NM_015327) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMG5
Synonyms:	EST1B; LPTS-RP1; LPTS-RP1; SMG-5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206137 representing NM_015327 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCCAAGGCCCCCCACAGGGGAGAGCAGCGAGCCCGAAGCAAAAGTCCTCCACACTAAGCGGCTTT  
ACCGGGCTGTGGTGGAGGCTGTGCATCGACTTGACCTCATCCTTTGCAACAAAAGTCTTATCAAGAAGT  
ATTCAAACCAGAAAACATTAGCCTGAGGAACAAGCTGCGTGAGCTCTGCGTCAAGCTTATGTTCTGCAC  
CCAGTGGACTATGGGAGAAAGGCTGAGGAGCTGCTGTGGAGAAAGGTATACTATGAAGTTATCCAGCTTA  
TCAAGACTAACAAAAGCACATCCACAGCCGGAGCACTTTGGAATGTGCCTACAGGACGCACCTGGTTGC  
TGGTATTGGCTTCTACCAGCATCTCCTTCTATATCCAGTCCCCTACCGAGTGGAACTGCAGTGTCTGC  
ATCGACTGGACCCATGTCACTGACCCCTCATAGGATGCAAGAAGCCAGTGTCTGCCTCAGGGAAGGAGA  
TGGATTGGGCACAGATGGCATGTACCGATGTCTGGTGTATCTGGGGATTTGTCCCAGATATCAGAATGA  
ATTAGCTGGCGTAGATACCGAGCTGCTAGCCGAGAGATTTACTACCAAGCCCTGTCAGTAGCTCCTCAG  
ATTGGAATGCCCTTCAATCAGCTGGCACCCCTGGCAGGCAGCAAGTACTATAATGTGGAAGCCATGTATT  
GCTACCTGCGCTGCATCCAGTCAGAAAGTGCCTTTGAGGGAGCCTATGGGAACCTCAAGCGGCTGTATGA  
CAAGGCAGCCAAAATGTACCACCAACTGAAGAAGTGTGAGACTCGGAACTGTCTCCTGGCAAAAAGCGA  
TGTAAGACATTAAAAGTTGCTAGTGAACCTTATGTATCTGCAAAGCCTCCTACAGCCAAAAGCAGCT  
CCGTGGACTCAGAGCTGACCTCACTTTGCCAGTCAGTCCCTGGAGGACTTCAACCTCTGCCTTCTACCT  
GCCCTCCTCACCAACCTCAGCCTGGCCAGTGAGGATGAGGAGGAGTATGAGAGTGGATATGCTTTCCTC  
CCGGACCTTCTCATCTTTCAAATGGTCATCATCTGCCTTATGTGTGTGCACAGCTTGGAGAGAGCAGGAT  
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AGTTGGTGTGACAGTGAAGGCTTTGAATCGGACTAAGCCATGACTCAGCCCGGCCAGT



GAGGGCTCAGACAGTGGCTCTGACAAGAGTCTTGAAGGTGGGGGAACGGCCTTTGATGCTGAAACAGACT  
 CGGAAATGAATAGCCAGGAGTCCCAGTACAGACTTGAAGATATGGAGGAAGAGGAGGGGACACGGTCACC  
 AACCTGGAGCCCCCTCGGGCAGATCAGAGGCTCCCGATTCCCTCAATGGCCCACTGGGCCCCAGTGAG  
 GCTAGCATTGCCAGCAATCTACAAGCCATGTCCACCCAGATGTTCCAGACTAAGCGCTGCTTCCGACTGG  
 CCCCCACCTTTAGCAACCTGCTCCTCCAGCCCACCACCAACCTCATACCTCGGCCAGCCACAGGCCTTG  
 CGTCAATGGGGATGTAGACAAGCCTTCAGAGCCAGCCTCTGAGGAGGGCTCTGAGTCGGAGGGGAGTGAG  
 TCCAGTGGACGCTCCTGTGCGAATGAGCGCAGCATCCAGGAGAAGCTTCAGGTCCTGATGGCCGAAGGTC  
 TGCTTCTGCTGTGAAAGTCTTCTGGACTGGCTTCGGACCAACCCCGACCTCATCATCGTGTGTGCGCA  
 GAGCTCTCAAAGTCTGTGGAACCGCTGTCTGTGTTGCTGAATCTGTTGCCTGCTGCTGGTGAACCTCCAG  
 GAGTCTGGCCTGGCCTTGTGTCCTGAGGTCCAAGATCTTCTTGAAGGTTGTGAAGTGCCTGACCTCCCCT  
 CTAGCCTTCTGCTCCAGAGGACATGGCTCTTCGTAACCTGCCCCGCTCCGAGCTGCCACAGACGCTT  
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 GCAGAGTTAAAAAGGAAACAGGTACATTCGCTGCCAGAAAGAGGTGGGAAAGAGCTTTGAGCGGCATA  
 AGCTGAAGAGGCAGGATGCAGATGCCTGGACTCTCTATAAGATCCTAGACAGCTGCAAACAGCTGACTCT  
 GGCCAGGGGGCAGGTGAGGAGGATCCGAGTGGCATGGTACCATCATCACAGGCCTTCCACTGGACAAC  
 CCCAGCGTGCTTTCAGGCCCATGCAGGCAGCCCTGCAGGCCGCTGCCACGCCAGTGTGGACATCAAGA  
 ATGTTCTGGACTCTACAAGCAGTGAAGGAAATTGGT

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC206137 representing NM\_015327  
 Red=Cloning site Green=Tags(s)

MSQPPTGESSEPEAKVLHTRKLYRAVVEAVHRLDLILCNKTAYQEVFKPENISLRNKLRELCVKLMFLH  
 PVDYGRKAEELLWRKVYVEVIQLIKTNKHIHSRSTLECAVRTHLVAGIGFYQHLLLYIQSHYQLELQCC  
 IDWTHVTDPLIGCKKPVASGKEMDWAQMACHRCLVYLGDLSRYQNELAGVDTELLAERFYQALSVAPQ  
 IGMPFNQLGTLGSKYYNVEAMCYLRICQSEVSFEGAYGNLKRLYDKAAKMYHQLKKCETRKLSPGKKR  
 CKDIKRLLVNFMYLQSLQPKSSVDSLELTLSCQSVLEDFNLCLFYLPSSPNLSLASEDEEEYESGYAFL  
 PDLLIFQMVIICLMCVHSLERAGSKQYSAATIAFTLALFVSHLVNHNIRLQAELEEENPVPAFQSDGTE  
 PESKEPVEKEEPEPPVTPQVGEGRKSRKFSRLSCLRRRRHPPKVGDDSDLSEGFESDSSHDSARAS  
 EGSDSGSDKSLEGGTAFDAETDSEMNSQESRSDLEDMEEEEGTRSPLEPPRGRSEAPDSLNGPLPSE  
 ASIASNLQAMSTQMFQTKRCFRLAPTFSNLLLQPTTNPHTSASHRPCVNGVDKPESEPAEEGSEGESE  
 SSGRSCRNERSIQEKLQVLMAEGLLPVAVKVFLDWLRTPDLIIIVCAQSSQSLWNRLSVLLNLLPAAGELQ  
 ESGLALCPEVQDLLEGCELPDLPSLLLPEDMALRNLPLRAAHRFNFDTRPLLSTLEESVVRICIR  
 SFGHFIA RLQGSILQFNPEVGIFVSIQSEQESLLQQAQAQFRMAQEEARRNRLMRDMAQLRLQLEVSQ  
 EGSLQPKAQSAMSPYLVPDTQALCHHLPVIRQLATSGRFVVIIPRTVIDGLDLLKKEHPGARDGIRYLE  
 AEFKKGNYIRQCQKEVGKSFERHKLKRQDADAWTLKILDSCKQLTLAQGAGEEDPSGMVTIITGLPLDN  
 PSVLSGPMQAALQAAAASVDIKNVLDYKQWKEIG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8113\\_b05.zip](https://cdn.origene.com/chromatograms/mk8113_b05.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_015327

**ORF Size:** 3048 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.

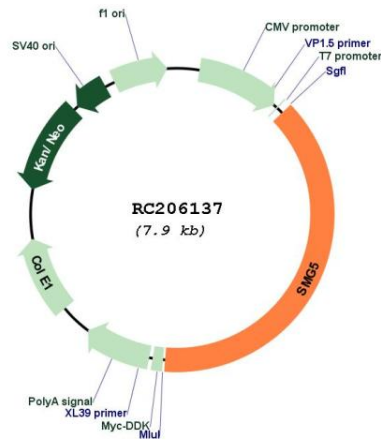
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_015327.3](#)

**RefSeq Size:** 4577 bp

RefSeq ORF:	3051 bp
Locus ID:	23381
UniProt ID:	<u>Q9UPR3</u>
Cytogenetics:	1q22
Domains:	PINc
MW:	113.9 kDa
Gene Summary:	SMG5 is involved in nonsense-mediated mRNA decay (Ohnishi et al., 2003 [PubMed 14636577]).[supplied by OMIM, Mar 2008]

**Product images:**



Circular map for RC206137