

## Product datasheet for **RC219022**

### **C19orf61 (SMG9) (NM\_019108) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	C19orf61 (SMG9) (NM_019108) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C19orf61
Synonyms:	C19orf61; F17127_1; HBMS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC219022 representing NM\_019108  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGCAATTGATGAGGAAGGAGGGAGAGAGATAGGAGATGAAGTCAATATATTGGTGAAGGAACAGA  
 CACAGTTAGGGTCAAGACTCTCATGAGGTTACTCAAGGAACCAGAGAAAAGAACGGGACTCAGACTCAGA  
 TTTCTCCCTCTTCAGCAGACTGAGGGATGCCAGCGAAGAGACAAGCACTTCCGTCATGCAGAAAACCC  
 CATCATCTCTCAAACCTCCAGCAGAGCGGCCCTCTGGAGAAGCCATCGTTCTCATGAAGCCACGGG  
 AGGAGGGGAAGGGCCTGTGGCCGTGACAGGTGCCTTACCCCTGAGGGCACCGCCACCACCCCTGC  
 AGCCCTGCGCCACCAAGGGGAGAAGGAGGGGCAGAGACCCACACAGCCTGTGTACCAGATCCAGAAC  
 CGGGGCATGGGACTGCCGACCAGCAGCCATGGACCCTGTCGTTGGTCAAGGCAAACTACTGCCCCAG  
 AGCGCATGAAGCACAGCATCAAGTTGGTGGATGACCAGATGAATTGGTGTGACAGTGCCATCGAGTACCT  
 GTTGGATCAGACTGATGTGTTGGTGGTGGTGTCTGGGCTCCAGGGGACAGGCAAGTCCATGGTCATG  
 TCATTGTTGTAGCAACTCCAGAGGAGGACCAGAGGACTTATGTTTTCCGGGCCAGAGCGCTGAAA  
 TGAAGGAACGAGGGGCAACCAGACCAGTGGCATTGACTTCTTTATTACCAAGAACGGATTGTTTTCT  
 GGACACACAGCCATCCTGAGCCCTTCTATCCTAGACCATCTCATCAATAATGACCGAAACTGCCTCCA  
 GAGTACAACCTTCCCACACTTACGTTGAAATGCAGTCACTCCAGATTGCTGCCTTCTTTTACGGTCT  
 GCCATGTGGTGATTGTTGTCCAGGACTGGTTCACAGACCTCAGTCTCTACAGGCTGTGGGACCTGGGGT  
 CAAGTGAAGAGCAACAGCCACTCACCCAAACCCCAAGTTCCTGCAGACAGCAGAGATGGTGAAGCCC  
 TCCACCCATCCCCAGCCAGAGTCCAGCAGCTCATCGGGCTCCGATGAAGGCACCGAGTACTACCC  
 ACCTAGTCTTCTGCAGAACAAAGCTCGCCGAGAGGACTTCTGTCTCGAAGCTGCGGAGTGCACAT  
 GATGATTGACCAGCTCATGGCCCACTCCCACTGCGTTACAAGGGAACCTGTCCATGTTACAATGCAAT  
 GTCTTCCCGGGCTTCCACCTGACTTCCGGACTCTGAGGTCAACTTATTCTGGTACCCTTATGGACA  
 GTGAAGCAGAGAGTGAAGAACCCACCAAGAGCAGGACCTGGTTCAGCCACTTCTCTCCCTGCTGCCTGG  
 GTATCGTGGCCACCCAGTTTCCAGTCTTGGTGAAGCTCCGGAGCCAAAGTATGTCATGGCCCGG  
 CCACAGCTGTACACACGATCCTCACCGAGAAGAACTGGTCCACTACGCTGCCCGATCTGGGATGGG  
 TGAGAAAGTCTCTGCTCTGGCAGAGTACAGCCGCTGCTGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC219022 representing NM\_019108  
 Red=Cloning site Green=Tags(s)

MAAIDEEGGREIGDEVNIVKEQTLGVKTLMRLLKEPEKERDSDSDF SPLQQTEGQRRDKHFRHAENP  
 HHPLKTSRAAPLEKPIVLMKPREEGKGPVAVTGASTPEGTAPPPPAAPPKGEKEGQRPTQPVYQIQN  
 RGMGTAAPAAMPVVGQAKLLPPERMKHSIKLVDDQMNWCDSAIEYLLDQTDVLLVGVGLGQGTGKSMVM  
 SLLSANTPEEDQRTYVFRAQSAEMKERGGNQTSGIDFFITQERIVFLDTQPILSPSILDHLINNDRLPP  
 EYNLPHTYVEMQSLQIAAFLFTVCHVIVVQDWF TDSL YRLWDLGCKCKSNSHSPQTPRFLQTAEMVKP  
 STPSPSHSSSSSGSDEGTEYYPHLVFLQNKARREDFCPRKLRQMLMIDQLMAHSHLRYKGLSMLQCN  
 VFPGLPPDFLDSEVNLFLVPFMDSEAESENPPRAGPGSSPLF SLLPGYRGHPSFQSLVSKLRSQVMSMAR  
 PQLSHTILTEKNWFHYAARIWDGVRKSSALAEYSRLLA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8022\\_f08.zip](https://cdn.origene.com/chromatograms/mk8022_f08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_019108

**ORF Size:** 1584 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.

**RefSeq:** [NM\\_019108.1](#), [NP\\_061981.1](#)

**RefSeq Size:** 2371 bp

**RefSeq ORF:** 1563 bp

**Locus ID:** 56006

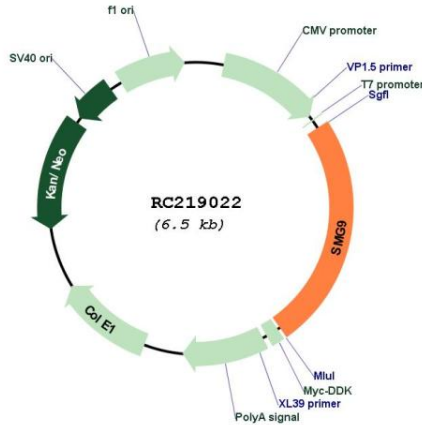
**UniProt ID:** [Q9H0W8](#)

**Cytogenetics:** 19q13.31

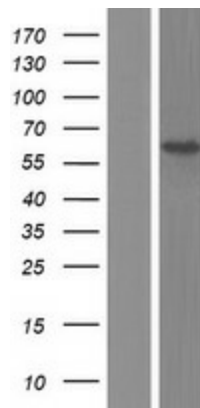
**MW:** 59 kDa

**Gene Summary:** This gene encodes a regulatory subunit of the SMG1 complex, which plays a critical role in nonsense-mediated mRNA decay (NMD). Binding of the encoded protein to the SMG1 complex kinase scaffold protein results in the inhibition of its kinase activity. Mutations in this gene cause a multiple congenital anomaly syndrome in human patients, characterized by brain malformation, congenital heart disease and other features. [provided by RefSeq, Jul 2016]

**Product images:**



Circular map for RC219022



Western blot validation of overexpression lysate (Cat# [LY412675]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219022 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).