

## Product datasheet for **MR211696**

### **Ncapg2 (NM\_133762) Mouse Tagged ORF Clone**

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | Ncapg2 (NM_133762) Mouse Tagged ORF Clone                                   |
| Tag:                      | Myc-DDK                                                                     |
| Symbol:                   | Ncapg2                                                                      |
| Synonyms:                 | 5830426I05Rik; Luzp5; mCAP-G2; Mtb                                          |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-Entry (PS100001)                                                      |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                        |
| ORF Nucleotide Sequence:  | >MR211696 representing NM_133762<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGGAAAAACGTGAGGCGTTTCATCCAAGCAGTATCTAAGGAGTTGGTTGAAGAGTTTCTGCAGTTTCTTC  
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AGAAGAATTATGGCAAAGACTGAAGGACTTACTAACAGAAACATTGTTGGAAAGCCCTGTGGATAGGTGG  
CAGACAGTGGAAGTCGAGGGTGCAGACGATATGGAATCAGAGCACAGTCCAAAGATGAGAAAGAGCATAA  
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CCAAAGTCCGAGAGGTGCTGAGTTACTTTACCAACAGAAAGTCCGTGAGGAGTGGAAAGAGATGCTGTA  
TAGGTTATATAAGCCATCCTGTGGAGGGGACTAAAGGCCAGAAATCTGAAGTTCGATCAAATGCTGCA  
TTGTTGTTTGTGAAGCATTTCTATTAGAGATCCAACTTCACTGCTACTGAAATGGACAATGAAATCC  
AGAAGCAGTTTGAAGAACTGTATAACCTTATAGAAGATCCTTATCCACGGGTTGTTCCACAGGCATCCT  
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AAAGTCACAGGGGAGCTGGCATTGATATAAGCTCAGCCGATGTTGCGGTGTTCTGTTTTAAGTGTGTC  
CAATTATTTTGGATAACAAGCTGAGCCACCCATTATTAGAACAGCTTTTGCCAACACTCAGGTATAGTCT  
CCACGATAACTCAGAGAAAGTGCGGGTGGCTTTTGTGGATTTGCTGCTGAAGATCAAGGCTGTGAGAGCT



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GCAAAGTTTTGGAAAATATGCCCATGGAGGACATTTTGGTTCGTCTGGAAATGGATTCTCGGCCTGTAT  
CTCGACGCCTGGTGAGCCTCATCTTCAACTCTTTCTGCCCGTGAACCGAGCCGGAGGAGGTGTGGTGTGA  
GCGCTGTGTACGCTGATCCAGATGAATCGCGCAGCTGCCAGGAGGTTCTATCAGTATGCCCATGAGCAT  
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TGTGCCTCACAGCTGTTCTGCATATTATTTGGTTATTAACAAAGGTAACATATAAGTGCAAAGGTGAA  
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GAAAGATTCCTATATGAGTCATCAATGAGAAGTTTGGGAGAAATTTCTGAATCCA

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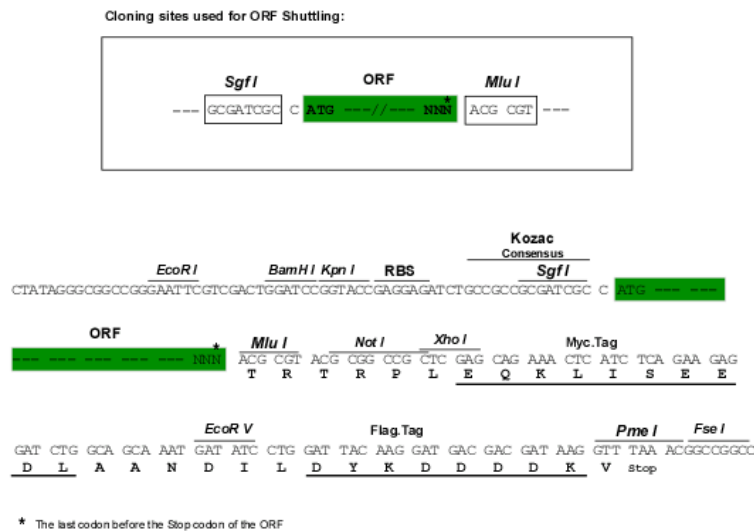
**Protein Sequence:** >MR211696 representing NM\_133762  
 Red=Cloning site Green=Tags(s)

MEKREAFIQAVSKELVEEFLQFLQLDKDSSNPFSLSELLDEL SRKQKEELWQRLKDLLTETLLESPVDRW  
 QTVEVEGADDMESEHSPKMRKSIKIICAIVTVILASVSIINEHENYGALLECAVILNGILYALPESEQKL  
 QNSIQDLVCVKKWERGLPAKEDMGKTA FIMLLRRSLETKSGADVCR LWRIHQALYCFDYDWEE SREIKDML  
 LECFINVNYIKKEEGRRFLSFLFSWNVDFIKMIHETIKNQLAGLQKSLMVHIAE IYFRAWKKASGKMLET  
 IEYDCIQDFMFHGIHLLRRSPVHSKVREVL SYFHQQKVRQGVEEMLYRL YKPILWRGLKARNSEVRSNAA  
 LLFVEAFPIRDPNFTATMDNEIQKQFEELYNLIEDPYPRV RSTGILGVCKISSKYWEMMPN ILVDFLK  
 KVTGELAFDISSADVRC SVFKCLPIILDNKL SHPLLEQLLPTLRYS LHDNSEKVRVAFVDLLLKIKAVRA  
 AKFWKICPMEDILVRLEMDSRPVSRR LVS LIFNSFLPVNQPEE VWCERCVT LIQMNR AAARRFYQYAHEH  
 TASTNIAKLIHVIRHCLNACIQRTLREGSEAHKECEKENASVLDKTL SVNDTAS MAGLLEIIVILWKNIH  
 RSLENNKEAKIYTINKFAAVLPEYLKVF KDERCKIPLFMLSFLPASAVPVFSCGVISVLRNQESVTGRS  
 YCTLLDCLCSWGQVGHVLELIDVWLPTVPPQAKSNLASKRKVEINDTCSVKPELALLYMEYLLTHPKNRE  
 CLLSVPQKKLNQLLKALEGSKAELESFLQSPSGNPLNFNKAT ALHAFGLYCRMSVHLQYKFCSEEKIHLS  
 ILDDTGSWLENKVLPLLEDQEEY LKL RKDVYQQIIQTYLAVCKDVVMVGLGDPKFQMQLQRSF GIMKT  
 YKGFFYVSLLLGILKEIAGNTIIHK TDSDEKVTVLFDLVQEVFQKMLECIACIFRKQPEESLP LFHSVQT  
 PLHEFITTIQSWHKDTAVHHA VLS TLIAAPVVEISHQLQKVSDIEELTSPQCLHDLPPFSRCLVGVIMKS  
 SDVVRSFVDELKACVTS GDVEGIVCLTAVLHIILVINKGKHISAKVKEVATAVYRKLKTFMEITLEEDSL  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

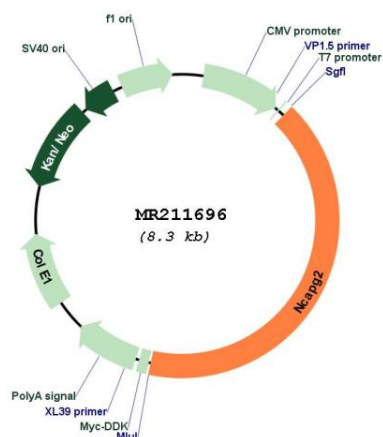


**ACCN:** NM\_133762

**ORF Size:** 3414 bp

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>                                                                      |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                    |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol> |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq:</b>                | <a href="#">NM_133762.4</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>RefSeq Size:</b>           | 6604 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>RefSeq ORF:</b>            | 3417 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Locus ID:</b>              | 76044                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>UniProt ID:</b>            | <a href="#">Q6DFV1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cytogenetics:</b>          | 12 F2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>MW:</b>                    | 130.9 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Gene Summary:</b>          | Regulatory subunit of the condensin-2 complex, a complex which establishes mitotic chromosome architecture and is involved in physical rigidity of the chromatid axis. Is required for early embryonic development and is essential for viability and expansion of the inner cell mass (ICM) of the implanting blastocyst.[UniProtKB/Swiss-Prot Function]                                                                                                                                                               |

## Product images:



Circular map for MR211696