

Product datasheet for **RC213532**

MAK (NM_005906) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAK (NM_005906) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAK
Synonyms:	RP62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC213532 representing NM_005906
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACCGATACACAACCATGAGACAGTTGGGGACGGCACGTATGGGAGTGTGCTTATGGCAAGAGTA
 ATGAATCCGGGGAGCTGGTGGCCATCAAAAGGATGAAGAGAAAGTTCTATTCTTGGGATGAATGCATGAA
 CTTGAGAGAAGTTAAGTCTCTGAAGAACTTAATCATGCCAATGTTATTAATTAAGAAAGTTATCAGA
 GAAATGACCATCTTTATTTTATATTTGAATATATGAAAGAAAACCTCTATCAATTAATGAAAGACAGAA
 ACAAGTTGTTCCCTGAATCAGTCATCAGAAATATTATGTATCAAATATTGCAAGGGCTGGCTTTTATCCA
 TAAACATGGCTTTTTTTCATAGGGACATGAAACCAGAAAACCTGCTTTGTATGGGTCCAGAGCTTGTGAAA
 ATTGCTGATTTTGGACTTGAAGAGAATTAAGGTCACAGCCACCATACACTGATTATGTATCTACCAGAT
 GGTATCGTGCCCTGAAGTTTACTGAGATCTTCAGTTTATAGTTCTCCATTGATGTGTGGCTGTTGG
 AAGTATCATGGCTGAACCTATATGTTAAGGCCACTTTTCCAGGGACAAGTGAGTTCGATGAAATCTTT
 AAAATTTGCCAAGTTTGGGACTCCCAAAAAAGTGACTGGCCAGAAGGATACAGCTGGCATCCTCTA
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 TATTCAGCTCATGACCGAAATGTTGAATTGGGATCCAAAGAAACGACCGACAGCAAGCCAGGCATTGAAA
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 AATCGATCAGGTTGTTGGACAACCCAGCCAAAACTAGCCAGCAGCCACTGCAGCCATTACAGCCGCCA
 CAGAACCTGAGCGTCCAGCAACCTCAAAGCAACAGAGTCAGGAGAAACCGCCACAAAACGCTATTCGCGA
 GCATCGTCAAAAACATGCCAATAGCCAAATGGCACACTGAGTCATAAAAAGTGGTAGGAGCGCTGGGG
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 AAGAAGCCAAGCATGGGTGTTTTTAAAGAAAAAGGAAAAAGATTCTCCATTTCCGCTTCCAGAGCCAG
 TACCCTCAGGCTCCAACCACTCGACAGGGGAAAAACAAGAGCTTACCTGCTGTTACTTCCCTAAAACTGA
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 TCCCAAGTCACTGGGACCCGTTGGGCGAAGCTGCTTCAAAGGAGCAATGCAGGAAATCTTGAAG
 TTATGCTACTTACAATCAGTCAGGATATATTCCTTCTTCTCAAAGGAGTGCAGTCAGCTGGCCAG
 AGGATCCACTTAGCACCTCTCAATGCAACGGCTTCAGAATATACCTGGAACACAAAACTGGTCGGGGC
 AGTTTTTACAGGACGTACTTATAATCTACAGCAAAAACCTAAATATTGTGAACCGTGCACAGCCATTCC
 CTCAGTGCACGGGAGGACAGACTGGGTGGCCAAGTATGGAGGCCACCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213532 representing NM_005906
 Red=Cloning site Green=Tags(s)

MNRYTTMRQLGDGTYGSVLMGKSNESEGELVAIKRMKRFYSWDECMNLREVKSLKLNHANVIKLKEVIR
 ENDHLYFIFEYMKENLYQLMKDRNKLFPESVIRNIMYQILQGLAFIHKHGFHHRDMKPENLLCMGPPELVK
 IADFGFLARELRSQPPYTDYVSTRWYRAPEVLLRSSVYSSPIDVWAVGSIMAE LYMLRPLFPGTSEVDEIF
 KICQVLGTPKKS DWPEGYQLASSMNF RFPQCVPINL KTLIPNASNEAIQLMTEMLNWDPKKRPTASQALK
 HPYFQVGVQLGPSNHLESKQSLNKQLQPLESKPSLVEVEPKPLPDIIDQVVGVQPKTSQQLPQIQQP
 QNLSVQQPPKQSQEKPPQTLFPSIVKNMPTKPNGTSLHKSGRRRWGQTIKFSGDSWEELEDYDFGASHS
 KKPSMGVFKERKKDSPFRLPEPVPSGNSHSTGENKSLPAVTSLSKSDSELSTAPTSKQYLYLKQSRYPGV
 NPKKVSLIASGKEINPHTWSNQLFPKSLGPVGAELAFKRSNAGNLGSYATYNQSGYIPSLFKKEVQSAGQ
 RIHLAPLNATASEYTWNKTGRGQFSGRTYNPTAKNLNIVNRAQPIPSVHGRTDWWAKYGGHR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6112_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005906

ORF Size: 1869 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_005906.6](#)

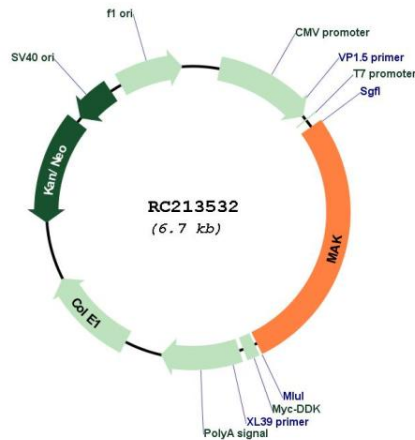
RefSeq Size: 3830 bp

RefSeq ORF: 1872 bp

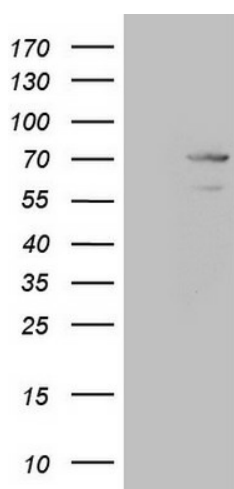
Locus ID: 4117
UniProt ID: [P20794](#)
Cytogenetics: 6p24.2
Domains: pkinase, TyrKc, S_TKc
Protein Families: Druggable Genome, Protein Kinase
MW: 70.4 kDa

Gene Summary: The product of this gene is a serine/threonine protein kinase related to kinases involved in cell cycle regulation. Studies of the mouse and rat homologs have localized the kinase to the chromosomes during meiosis in spermatogenesis, specifically to the synaptonemal complex that exists while homologous chromosomes are paired. Mutations in this gene have been associated with ciliary defects resulting in retinitis pigmentosa 62. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC213532



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MAK (Cat# RC213532, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAK (Cat# [TA808843])(1:2000).