

Product datasheet for **RC234651**

MAK (NM_001242957) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAK (NM_001242957) 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:

>RC234651 representing NM_001242957
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACCGATACACAACCATGAGACAGTTGGGGACGGCACGTATGGGAGTGTGCTTATGGCAAGAGTA
ATGAATCCGGGGAGCTGGTGGCCATCAAAAGGATGAAGAGAAAGTTCTATTCTTGGGATGAATGCATGAA
CTTGAGAGAAGTTAAGTCTCTGAAGAACTTAATCATGCCAATGTTATTAATTAAGAAAGTTATCAGA
GAAATGACCATCTTTATTTTATATTTGAATATATGAAAGAAAACCTCTATCAATTAATGAAAGACAGAA
ACAAGTTGTTCCCTGAATCAGTCATCAGAAATATTATGTATCAAATATTGCAAGGCTGGCTTTTATCCA
TAAACATGGCTTTTTTTCATAGGGACATGAAACCAGAAAACCTGCTTTGTATGGGTCCAGAGCTTGTGAAA
ATTGCTGATTTTGGACTGCAAGAGAATTAAGGTCACAGCCACCATACACTGATTATGTATCTACCAGAT
GGTATCGTGCCCTGAAGTTTACTGAGATCTTCAGTTTATAGTTCTCCCATTGATGTGTGGGCTGTTGG
AAGTATCATGGCTGAACCTATATGTTAAGGCCACTTTTCCAGGGACAAGTGAGGTCGATGAAATCTTT
AAAATTTGCCAAGTTTGGGACTCCCAAAAAAGTGACTGGCCAGAAGGATACCACTGGCATCCCTCTA
TGAACCTCCGTTTTCCCACTGTGTTCCCTATAAACTTAAAACTCTTATCCCAATGCCAGTAATGAAGC
TATTCAGCTCATGACCGAAATGTTGAATTGGGATCCAAAGAAACGACCGACAGCAAGCCAGGCATTGAAA
CACCCATATTTCAAGTTGGTCAGGATATTAGGCCCTTCGTCAAATCATCTGGAATCAAAAACAGTCTTTAA
ATAAGCAGCTGCAACCATTAGAATCAAAGCCATCTTTAGTTGAGGTAGAGCCTAAGCCTCTGCCGGATAT
AATCGATCAGGTTGTTGGACAACCCAGCCAAAACTAGCCAGCAGCCACTGCAGCCATTACAGCCGCCA
CAGAACCTGAGCGTCCAGCAACCTCAAAGCAACAGAGTCAGGAGAAACCGCCACAAACGCTATTCGCGA
GCATCGTCAAAAACATGCCAACTAAGCCAAATGGCACACTGAGTCATAAAAGTGGTAGGAGCGTTGGGG
TCAGACTATCTTCAAGTCTGGAGATAGCTGGGAAGAGTTGGAGGACTATGATTTCCGGAGCCTCCCATTC
AAGAAGCCAAGCATGGGTGTTTTAAAGAAAAAGGAAAAAGATTCTCCATTTCCGCTTCCAGAGCCAG
TACCCTCAGGCTCCAACCACTCGACAGGGGAAAAACAAGAGCTTACCTGCTGTTACTTCCCTAAAACTGA
TTCCGAATTGTCAACTGCTCCAACCTCTAACAGTACTACTTGAACAATCAAGATATCTTCCAGGTGTG
AATCCCAAGAAGGTGCTTGTAGCCAGTGGAAAGGAAATAAACCCACACTTGGAGCAACCAGTTAT
TCCCAAGTCACTGGACCCGTTGGGGCAGAACCTGCTTTCAAAGGAGCAATGCAGAAGAAAGCATAAT
TAAACCAATCGAAAACTATCATGCAATGAACTTTTCTGAAAAATTAGAGGACCCACAAGGAAATCTT
GGAAGTTATGCTACTTACAATCAGTCAGGATATATTCCTTCTTCTCAAAAAGAAGTGCAGTCAGCTG
GCCAGAGGATCCACTTAGCACCTCTCAATGCAACGGCTTCAGAATATACCTGGAACAAAAACTGGTCG
GGGGCAGTTTTTCAGGACGTACTTATAATCTACAGCAAAAAACCTAAATATTGTGAACCGTGCACAGCCC
ATTCCTCAGTGCATGGGAGGACAGACTGGGTGGCCAAGTATGGAGGCCACCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234651 representing NM_001242957
Red=Cloning site Green=Tags(s)

MNRYTTMRQLGDGTYGSVLMGKSNESEGELVAIKRMKRKFYSWDECMNLREVKSLKKLNHANVIKLKEVIR
 ENDHLYFIFEYMKENLYQLMKDRNKLFPESVIRNIMYQILQGLAFIHKHGFHHRDMKPENLLCMGPPELVK
 IADFGlareLRSQPPYTDYVSTRWYRAPEVLLRSSVYSSPIDVWAVGSIMAEYLMLRPLFPGTSEVDEIF
 KICQVLGTPKKSQSDWPEGYQLASSMNFRRFPQCVPINLKTLPNASNEAIQLMTEMLNWDPKKRPTASQALK
 HPYFQVGQVLGPSSNHLESKQSLNKQLQPLESKPSLVEVEPKPLPDIIDQVVGQPQPKTSQQPLQPIQPP
 QNLSVQQPPKQSQEKPPQTLFPSIVKNMPTKPNGLSHKSGRRRWGQTFKSGDSWEELEDYDFGASHS
 KKPSMGVFKERKKDSPFRLPEPVPSPGNSHSTGENKSLPAVTSLSKSDSELSTAPTSKQYYLKQSRYPGV
 NPKKVSLIASGKEINPHTWSNQLFPKSLGPVGAELAFKRSNAEESIIEKIEKLSNETFPEKLEDPQGNL
 GSYATYNQSGYIPSLFKKEVQSAGQRIHLAPLNATASEYTWNKTGRGQFSGRTYNPTAKNLNIVNRAQP
 IPSVHGRTDWVAKYGGHR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001242957

ORF Size: 1944 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_001242957.3](#)

RefSeq Size: 3974 bp

RefSeq ORF: 1947 bp

Locus ID: 4117

UniProt ID: [P20794](#)

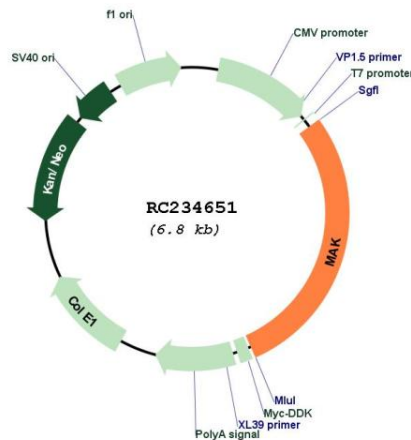
Cytogenetics: 6p24.2

Protein Families: Druggable Genome, Protein Kinase

MW: 73.9 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 RC234651