

## Product datasheet for **MR207997**

### Clk2 (NM\_001163432) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Clk2 (NM_001163432) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Clk2
Synonyms:	AU041688
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR207997 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCCATCCCCGAAGGTACCATTCTCAGAGCGAGGTAGCCGGGGAGTTACCACGAACACTATCGGA  
 GCCGAAAGCATAAAGCAAGAAGAAGTCTGCTCCTGGTCAAGTAGCAGTGACCCGACAAAGCCGCGCGGAG  
 GGAGGACAGCTACCACGTTCCGGTCCCGAAGCTATGATGACCATTCTGCCGATCGCGCGCTGTACGATCGG  
 CGGTACTGTGGCAGCTACAGGCGCAATGACTACAGCCGGGACAGAGGGGAGGCTTACTACGACACAGACT  
 TTCGGCAGTCTTGAATACCATCGAGAGAAGCAGCAGTTACCGAAGCCAGCGCAGCAGCCGAAGGAAACA  
 CAGAAGGCGGAGGAGACGGAGCCGGACATTAGCCGCTCATCTTACACAGCAGCCGGAGAGCCAAGAGT  
 GTAGAGGACGACGCTGAGGGCCACCTCATCTACCACGTCGGGGACTGGCTACAAGAGCGATATGAAATTG  
 TAAGCACCTTAGGAGAAGGGACCTTCGGCCGAGTTGTGCAGTGTGTGGACCATCGCAGGGCGGAACACG  
 AGTTGCCCTGAAGATCATTAAAGAAATGTGAAAAGTACAAGGAAGCAGCCCGACTAGAAATCAACGTGCTG  
 GAGAAAATCAATGAGAAAGATCCTGACAACAAGAACCTCTGTGTCCAGATGTTTGACTGGTTTGACTACC  
 ATGGCCACATGTGTATCTCCTTTGAGCTTCTGGGCCTTAGCACCTTCGATTTCTCAAAGACAACAACACTA  
 CCTGCCCTACCCCATCCCAAGTGCGCCACATGGCCTTCCAGCTCTGCCAGGCCGTCAAGTTCTCCAT  
 GATAACAAGTTGACACATACGGACCTCAAACCTGAAAAATTTCTGTTTGTGAATTCAGACTACGAACTCA  
 CCTACAACCTAGAGAAGAAGCGAGATGAGCGCAGTGTAAAGAGCACAGCCGTGCGGGTGGTGGACTTCGG  
 CAGTGCCACCTTTGACCATGAACACCATAGCACCATTGTCTCCACTCGCCATTACCGAGCCCCGAGGTC  
 ATCCTGGAGTTGGCTGGTCACAGCCATGCGATGTATGGAGCATAGGCTGCATCATCTTTGAGTACTACG  
 TTGGCTTACCCTTTCCAGACCATGACAACAGAGAGCATCTAGCCATGATGGAAGGATCCTGGGTC  
 TGTCCTTCTCGGATGATCAGAAAGACAAGAAAACAGAAATATTTTTATCGGGGTCGCTGGATTGGGAT  
 GAGAACACCTCAGCCGGGCGCTACGTTCTGTGAGAACTGCAAACCTCTGCGCGGTATCTGACCTCAGAGG  
 CAGAGGACCACCACGCTCTTCGATCTGATTGAAAATATGCTAGAGTATGAGCCTGCTAAGCGGCTGAC  
 CTAGGTGAAGCCCTCAGCATCCTTTCTTCGCTGCCTTCGGACTGAGCCACCAACCAAGTTGTGG  
 GACTCCAGTCGGGATATCAGTCGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207997 protein sequence  
 Red=Cloning site Green=Tags(s)

MHPRRYHSSERSRGSYHEHYRSRKHKRRRSRSWSSSSDRTRRRRRREDSYHVRSRSYDDHSSDRRLYDR  
 RYCGSYRRNDYSRDRGEAYYDTRFRQSYEYHRENSYSRQSSRRKHRRRRRRSRTRFSRSSHSSRRRAKS  
 VEDDAEGHLIYHVGDWLQERYEIVSTLGEFTFGRVVQCVDHRRGGTRVALKIIKNVEKYKEAARLEINVL  
 EKINEKDPDNKNCVQMFDFDYHGMCSIFELLGLSTFDLKDNNYLPYPIHQVRHMAFQLCQAVKFLH  
 DNKLTHDLKPENILFVNSDYELTYNLEKRDERSVKSTAVRVVDFGSATFDHEHHSTIVSTRHYRAPEV  
 ILELGSQPCDVWSIGCIIFEYVYVGFLLFQTHDNREHLAMMERILGPVPSRMIRKTRKQKYFYRGRLDWD  
 ENTSAGRYVRENCKPLRRYL TSEAEDHHQLFDLIENMLEYEPAKRLTLGEALQHPFFACLRTPEPNTKLW  
 DSSRDISR

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001163432

**ORF Size:** 1497 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\\_001163432.1](#), [NM\\_001163432.2](#), [NP\\_001156904.1](#)

**RefSeq Size:** 2307 bp

**RefSeq ORF:** 1497 bp

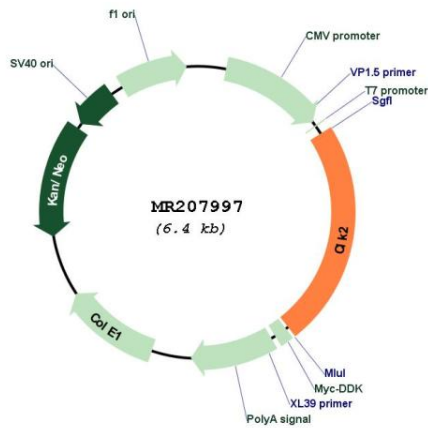
**Locus ID:** 12748

**Cytogenetics:** 3 F1

**MW:** 60 kDa

**Gene Summary:**

Dual specificity kinase acting on both serine/threonine and tyrosine-containing substrates. Phosphorylates serine- and arginine-rich (SR) proteins of the spliceosomal complex. May be a constituent of a network of regulatory mechanisms that enable SR proteins to control RNA splicing and can cause redistribution of SR proteins from speckles to a diffuse nucleoplasmic distribution. Acts as a suppressor of hepatic gluconeogenesis and glucose output by repressing PPARGC1A transcriptional activity on gluconeogenic genes via its phosphorylation. Phosphorylates PPP2R5B thereby stimulating the assembly of PP2A phosphatase with the PPP2R5B-AKT1 complex leading to dephosphorylation of AKT1. Phosphorylates: PTPN1, SRSF1 and SRSF3. Regulates the alternative splicing of tissue factor (F3) pre-mRNA in endothelial cells.[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for MR207997