

Product datasheet for **MR231264**

Clock (NM_001289826) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Clock (NM_001289826) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Clock
Synonyms:	5330400M04Rik; KAT13D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR231264 representing NM_001289826
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGTTTACCCTAAGCTGTAGTAAAATGAGCTCAATTGTTGACAGAGATGACAGTAGTATTTTTGATG
 GATTGGTGAAGAAGATGACAAGGACAAAAGCAAAAAGAGTATCTAGAAACAAATCAGAAAAGAAAGTAG
 AGATCAGTTCAATGTCCTCATTAAAGGAGCTGGGGTCTATGCTTCCTGGTAAACGCGAGAAAGATGGACAAG
 TCTACTGTTTACAGAAGAGCATTGATTTTTTGCGCCAAACATAAAGAGACCACTGCACAGTCAGATGCTA
 GTGAGATTCGACAGGACTGGAACCCACATTCCTTAGTAATGAAGAGTTTACACAGTTAATGTTAGAGGC
 TCTTGATGGTTTTTTTTAGCGATCATGACAGATGGAAGTATAATATATGTATCTGAGAGTGAACCTCG
 TTAAGTGAACATTTACCATCTGATCTTGTGGATCAAAGTATATTTAATTTTATCCAGAGGGAGAATC
 CAGAGGTTTATAAGATACTCTACTCATCTGCTGGAAAGTGACTCATTAAACCCCTGAGTACTTAAAATC
 AAAAAATCAGTTAGAATCTGTTGTACATGCTTCGAGGAACAATAGACCCAAAGGAGCCATCCACCTAT
 GAATATGTGAGATTTATAGGAAATTTAAATCTTTAACCAAGTGTATCAACTTCAACACACAATGGTTTTG
 AAGAACTATACAACGCACACATAGGCCTTCTTATGAAGATAGAGTTTGTGTTTGTAGCTACTGTCAGATT
 AGCTACACCTCAGTTCATCAAGGAAATGTGACTGTTGAAGAACCAATGAAGAGTTTACATCTAGACAC
 AGTTTAGAATGGAAGTTTCTATTTTTAGATCACAGGGCACCACCAATAATAGGCTATTTGCCATTTGAAG
 TCTTGGGAACATCAGGCTATGATTACTATCATGTGGATGACCTAGAAAATCTGGCAAAATGTCACGAGCA
 CTTAATGCAATATGGAAGGCAAAATCGTGTACTATAGATTCCTGACCAAGGCCAGCAGTGGATATGG
 CTTCAGACTCATTATTATATTACTTACCATCAGTGGAAATCAAGGCCAGAGTTCATTGTTGTACTCACA
 CTGTAGTAAGTTATGCAGAAGTTAGGGCTGAAGACGGGAGAACTTGGCATTGAAGAGTCTCTTCTGGA
 GACAGCTGCTGACAAAAGCCAAGATTCTGGGTCTGACAATCGTATCAACACAGTGAAGTCTCAAGGAAGCA
 CTGAAAAGGTTTGTATCACAGCCCAACTCCTTCTGCCTCCTCTAGAAGCTCACGAAAGTATCTCACACCG
 CAGTCTCAGACCTTCTCCACACCGACAAAGTCCCTACTGATACTAGCACTCCTCCAGACAGCATT
 GCCAGCTCATGAAAAGATGACACAGCGGAGGTCGCTCCTCAGCAGTCAGTCCATAAACTCCAGTCAGTT
 GGTCCATCATTAAACACAGCCAGCGATGTCTCAAGCTGCAATTTACCAATCCACAAGGCATGTCACAGT
 TTCAGTTTTCAGCTCAGTTAGGAGCCATGCAGCATCTAAAAGACCAGCTAGAGCAGCGGACACGGATGAT
 AGAGGCAATATTCATCGGCAGCAAGAAGAACTAAGGAAAATCAAGAGCAACTTCAGATGGTCCATGGT
 CAAGGGCTACAGATGTTTTGCAGCAATCAAACCTGGATTGAATTTTGGTTCTGTTCAACTTTCTCTG
 GAAATCTAATATCCAGCAACTCACACCTGTAATATGCAAGGCCAGGTTGTCCCTGCTAACCAAGTTCA
 GAGTGGACATATCAGCACAGGCCAGCACATGATACAGCAACAGACTTTACAAAGTACATCAACTCAGCAG
 AGTCAACAGAGTGAATGAGTGGACACAGTCAGCAGACGTCCTTCCAAGTCAGACACCGAGCACTCTCA
 CAGCCCCACTGTACAATACGATGGTGAATTTCCAGCCTGCAGCTGGGAGCATGGTCCAGATTCATCCAG
 TATGCCACAGAACAGTACCCAGAGTGTACAGTCACTACGTTCACTCAGGACAGACAGATAAGATTTTCT
 CAAGGTCAGCAACTTGTGACCAATAGTGACTGCTCCTGTAGCTTGTGGGGCCGTCATGGTACCAAGTA
 CCATGCTTATGGGTCAGGTGGTACTGCCTATCCTACCTTCGCCACACAACAGCAGCAGGACAGACATT
 ATCGGTAACACAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGT
 TCCCAGGAACAGCAGCTTCTTCAAGTTCAGCAGCCAGCTCAGGCCAGCTGGGCCAGCCACACAGCAGT
 TCTTACAGACATCTAGGTTGCTCCACGGGAATCCTTCGACACAGCTCATCCTCTGCTGCCTTTCCACT
 ACAACAGAGCACTTTCCCTCCTTCGACACCAGCAACACCAGCCTCAGCAGCAACAGCAGCTTCTCGG
 CACAGGACTGACAGCCTGACTGACCTTCAAGGTCCAGCCACAG

ACGGTACGGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231264 representing NM_001289826
 Red=Cloning site Green=Tags(s)

MVFTVSCSKMSSIVDRDDSSIFDGLVEEDDKDKAKRVS RNKSEKKRRDQFNVLIKELGSMLPGNARKMDK
 STVLQKSIDFLRKHKETTAQSDASEIRQDWKPTFLSNEEF TQLMLEALDGFFLAIMTDGSIYVSESVTS
 LLEHLPSDLVDQSI FNF IPEGEHSEVYKILSTHLL ESDSLTPEYLKSKNQLEFCCHMLRGTIDPKEPSTY
 EYVRFIGNFKSLTSVSTSTHNGFEGTIQRTHRPSYEDRVCFVATVRLATPQFIKEMCTVEEPNEEFTSRH
 SLEWKFLFLDHRAPPIIGYLPFEVLGTSYDYHVDLLENLAKCHEHLMQYGKGKSCYYRFLTKGQQWIW
 LQTHYYITYHQWNSRPEFIVCTHTVVSYAERRRREL GIEESLPETAADKSQDSGSDNRINTVSLKEA
 LERFDHSPTPSASSRSSRKSHTAVSDPSSTPTKIPTDTSTPPRQHLPAHEKMTQRRSSFSSQSINSQSV
 GPSLTQPAMSAANLPIPQGMSQFQFSAQLGAMQHLKDQLEQRTRMIEANIHRQQEELRKIQEQLMVHG
 QGLQMFLQQSNPGLNFGSVQLSSGNSNIQQLTPVNMQQGVVPANQVQSGHISTGQHMIQQQTLQSTSTQQ
 SQQSVMSGHSQQTSLPSQTPSTLTAPLYNTMVISQPAAGSMVQIPSSMPQNSTQSATVTTFTQDRQIRFS
 QQQLVTKLVTAPVACGAVMVPSTMLMGQVVTAYPTFATQQQQAQTL SVTQQQQQQQQPPQQQQQQQS
 SQEQQLPSVQPPAQALGPPQQFLQTSRLLHGNPSTQLILSAAFPLQQSTFPPSHHQHQFPQQQQQLPR
 HRTDSLTDPSKVQPQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

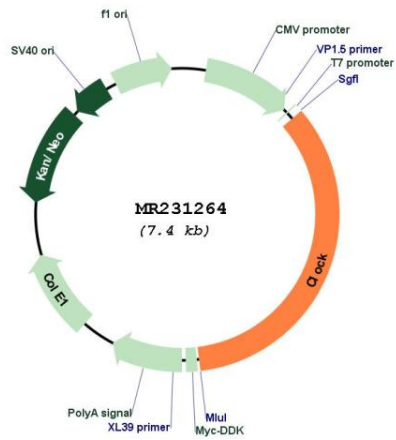
SgfI-MluI

Cloning Scheme:



ACCN:	NM_001289826
ORF Size:	2565 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:	<ol style="list-style-type: none">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_001289826.1 , NP_001276755.1
RefSeq Size:	9758 bp
RefSeq ORF:	2568 bp
Locus ID:	12753
UniProt ID:	O08785
Cytogenetics:	5 40.63 cM
MW:	96.4 kDa
Gene Summary:	The protein encoded by this gene plays a central role in the regulation of circadian rhythms. The protein encodes a transcription factor of the basic helix-loop-helix (bHLH) family and contains DNA binding histone acetyltransferase activity. The encoded protein forms a heterodimer with Arntl (Bmal1) that binds E-box enhancer elements upstream of Period (Per1, Per2, Per3) and Cryptochrome (Cry1, Cry2) genes and activates transcription of these genes. Per and Cry proteins heterodimerize and repress their own transcription by interacting in a feedback loop with Clock/Arntl complexes. Polymorphisms in this gene may be associated with behavioral changes, obesity, and metabolic syndrome. Two transcripts encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2014]

Product images:



Circular map for MR231264