

Product datasheet for **MR204231**

Nek7 (NM_021605) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nek7 (NM_021605) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nek7
Synonyms:	2810460C19Rik; AU020186
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204231 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGAACAATCACAAGGAATGCAAGGGCCGCCGTTACTCAGTTCAGCCACAGAAGGCATTACGGC
CAGATATGGGCTATAACTTTAGCCAACCTCCGAATAGAAAAGAAAATGGTCGTGGACAATTTAGTGA
AGTTTATAGAGCATCCTGTCTTGGATGGAGTGCCGGTAGCGTTAAAAAAGTACAGATATTTGATTTA
ATGGATGCCAAAGCACGTGCTGATTGTATCAAAGAAATAGACCTCCTAAGCAACTCAACCATCCAATG
TAATTAATACTATGCATCATTATTGAGGATAATGAGCTGAACATAGTTTTGGAGTTAGCAGATGCTGG
TGACCTCTCCAGAATGATAAAGCACTTTAAGAAACAAAAGAGGCTAATCCCTGAGAGAACCCTTTGGAAA
TACTTCGTTTCAGCTCTGCAGTGCAGTGGACCACATGCATTCTCGAAGAGTCATGCACAGAGATATAAAAC
CAGCTAATGTGTTTATTACAGCCACTGGGGTAGTAAAACCTCGGAGACCTTGGGCTTGGTCGGTTTTTCAG
CTCCAAAACCACAGCTGCACATTCTTTAGTGGGTACACCTTACTACATGTCTCCAGAGAGAATACATGAA
AATGGATACAACTTCAAGTCTGACATCTGGTCTTTGGCTGTCTGCTATATGAGATGGCTGCACTGCAGA
GTCCTTTCTACGGCGACAAGATGAACTTGTATTCTCTGTGTAAGAAGATAGAGCAGTGTGACTACCCGCC
TCTCCCGTCAGATCACTATTCGGAGGAGCTACGACAGCTAGTTAATATATGCATCAACCCAGATCCAGAG
AAGCGACCCGACATCGCCTATGTTTATGATGTGGCAAAGAGGATGCATGCATGTACCGCAAGCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204231 protein sequence
 Red=Cloning site Green=Tags(s)

MDEQSQGMQGPVPTQFQPQKALRPDMGYNTLANFRIEKKIGRQFSEVYRASCLLDGVPVALKKVQIFDL
 MDAKARADCIKEIDLLKQLNHPNVIKYASFIEDNELNIVLELADAGDLSRMIKHFKKQKRLIPERTVWK
 YFVQLCSALDHMHSRRVMHRDIK PANVFITATGVVKGDLGLGRFFSSKTTAAHSLVGTPTYMSPERIHE
 NGYNFKSDIWSLGCLLYEMAALQSPFYGDKMNL YSLCKKIEQCDYPPLP SDHYSEELRQLVNICINPDPE
 KRPDIAVYVDVAKRMHACTAST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021605

ORF Size: 909 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_021605.4](#)

RefSeq Size: 3366 bp

RefSeq ORF: 909 bp

Locus ID: 59125

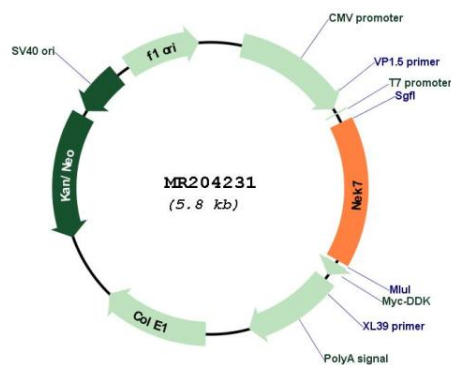
UniProt ID: [Q9ES74](#)

Cytogenetics: 1 60.82 cM

MW: 34.5 kDa

Gene Summary: Protein kinase which plays an important role in mitotic cell cycle progression. Required for microtubule nucleation activity of the centrosome, robust mitotic spindle formation and cytokinesis. Phosphorylates RPS6KB1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204231