

Product datasheet for RC233941

NEK2 (NM_001204183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK2 (NM_001204183) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NEK2
Synonyms:	HsPK21; NEK2A; NLK1; PPP1R111; RP67
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233941 representing NM_001204183 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTCCCGGGCTGAGGACTATGAAGTGTGTACACCATTGGCACAGGCTCCTACGGCCGCTGCCAGA
AGATCCGGAGGAAGAGTGATGGCAAGATATTAGTTTGGAAAGAACTTGACTATGGCTCCATGACAGAAGC
TGAGAAACAGATGCTTGTCTGAAGTGAATTTGCTTCGTGAAGTAAACATCCAAACATCGTTCGTTAC
TATGATCGGATTATTGACCGGACCAATACAACACTGTACATTGTAATGGAATATTGTGAAGGAGGGGATC
TGGCTAGTGTAATTACAAAGGGAACCAAGGAAAGCAATACTTAGATGAAGAGTTTGTCTTCGAGTGAT
GACTCAGTTGACTCTGGCCCTGAAGGAATGCCACAGACGAAGTATGGTGGTCATACCGTATTGCATCGG
GATCTGAAACCAGCCAATGTTTTCTGGATGGCAAGCAAAACGTCAGCTTGGAGACTTTGGGCTAGCTA
GAATATTAACCATGACACGAGTTTTGCAAAAACATTTGTTGGCACACCTTATTACATGTCTCCTGAAACA
AATGAATCGCATGTCTACAATGAGAAATCAGATATCTGGTCATTGGGCTGCTTGTGTATGAGTTATGT
GCATTAATGCCTCCATTTACAGCTTTTAGCCAGAAAGAACTCGCTGGGAAAATCAGAGAAGGCAAAATCA
GGCAATTCATACCGTTACTCTGATGAATTGAATGAAATATTACGAGGATGTTAAACTTAAAGGATTA
CCATCGACCTTCTGTTGAAGAAATCTTGAGAACCCTTTAATAGCAGATTTGGTTGCAGACGAGCAAAGA
AGAAATCTTGAGAGAAGGGCGACAATTAGGAGAGCCAGAAAAATCGCAGGATTCAGCCCTGTATTGA
GTGAGCTGAAACTGAAGGAAATTCAGTTACAGGAGCGAGAGCTCTCAAAGCAAGAGAAGAAAGATT
GGAGCAGAAAGAACAGGAGCTTTGTGTTGTTGAGAGACTAGCAGAGGACAAACTGGCTAGAGCAGAAAAAT
CTGTTGAAGAACTACAGCTTGCTAAAGGAACGGAAGTTCTGTCTCTGGCAAGTAATCCAGGTATGAGAA
TCAACTTGGTCAACAGAAGCTGGTGTCTACAAA

ACGCGTACGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC233941 representing NM_001204183
Red=Cloning site Green=Tags(s)

MPSRAEDYEVLYTIGTGSYGRCQKIRRKSDGKILVWKELDYGSMTAEKQMLVSEVNLRLRELKHPNIVRY
 YDRIIDRTNTTL YIVMEYCEGGDLASVITKGTKERQYLDEEFVLRVMTQLTLALKECHRRSDGGHTVLHR
 DLK PANVFLDGKQNVKLGDFGLARILNHDT SFAKTFVGT PYYMSPEQMNRMSYNEKSDIWSLGCLLYELC
 ALMPPFTAFS QKELAGKIREGKFRRIPIRYSDLENEIITRMLNLKDYHRPSVEEILENPLIADLVADEQR
 RNLERRGRQLGEPEKSQDSSPVLSELKLEIQLQERERALKAREERLEQKEQELCVRERLAEDKLARAEN
 LLKNYSLLKERKFLSLASNPGMRINLVNRSWCYK

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_001204183

ORF Size: 1152 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_001204183.1](#), [NP_001191112.1](#)

RefSeq Size: 1938 bp

RefSeq ORF: 1155 bp

Locus ID: 4751

UniProt ID: [P51955](#)

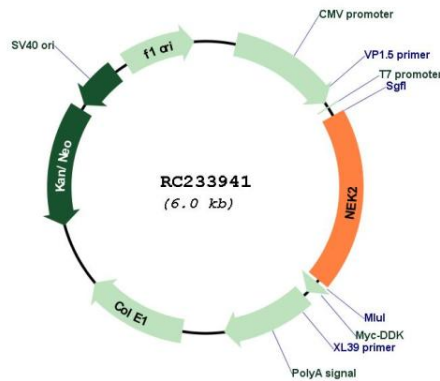
Cytogenetics: 1q32.3

Protein Families: Druggable Genome, Protein Kinase

MW: 45.4 kDa

Gene Summary: This gene encodes a serine/threonine-protein kinase that is involved in mitotic regulation. This protein is localized to the centrosome, and undetectable during G1 phase, but accumulates progressively throughout the S phase, reaching maximal levels in late G2 phase. Alternatively spliced transcript variants encoding different isoforms with distinct C-termini have been noted for this gene. [provided by RefSeq, Feb 2011]

Product images:



Circular map for RC233941