

Product datasheet for **RC203609**

NEK6 (NM_014397) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK6 (NM_014397) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NEK6
Synonyms:	SID6-1512
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203609 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGACAGCCGGCCACATGCCCATGGAGGGAGTTCCAACAACCTCTGCCACACCCTGGGGCCTG
TGCATCCTCCTGACCCACAGAGGCATCCCAACACGCTGTCTTTTCGCTGCTCGCTGGCGGACTTCCAGAT
CGAAAAGAAGATAGGCCGAGGACAGTTCAGCGAGGTGTACAAGGCCACCTGCCTGCTGGACAGGAAGACA
GTGGCTCTGAAGAAGGTGCAGATCTTTGAGATGATGGACGCCAAGGCGAGGCAGGACTGTGTCAAGGAGA
TCGGCCTCTTGAAGCAACTGAACCACCCAAATATCATCAAGTATTTGGACTCGTTTATCGAAGACAACGA
GCTGAACATTGTGCTGGAGTTGGCTGACGCAGGGGACCTCTCGCAGATGATCAAGTACTTTAAGAAGCAG
AAGCGGCTCATCCCGGAGAGGACAGTATGGAAGTACTTTGTGCAGCTGTGCAGCGCCGTGGAGCAGATGC
ATTCACGCCGGGTGATGCACCGAGACATCAAGCCTGCCAAGTGTTCATCACAGCCACGGGCGTCGTGAA
GCTCGGTGACCTTGGTCTGGGCCGCTTCTTTCAGCTCTGAGACCACCGCAGCCCACTCCCTAGTGGGGACG
CCCTACTACATGTCACCGGAGAGGATCCATGAGAACGGCTACAACCTCAAGTCCGACATCTGGTCTTTGG
GCTGTCTGCTGTACGAGATGGCAGCCCTCCAGAGCCCTTCTATGGAGATAAGATGAATCTTCTCCCT
GTGCCAGAAGATCGAGCAGTGTGACTACCCCACTCCCGGGGAGCACTACTCCGAGAAGTTACGAGAA
CTGGTCAGCATGTGCATCTGCCCTGACCCCAACAGAGACCTGACATCGGATACGTGCACCAGGTGGCCA
AGCAGATGCACATCTGGATGTCCAGCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203609 protein sequence
Red=Cloning site Green=Tags(s)

MAGQPGHMPHGGSSNNLCHTLGPVHPPDPQRHPNTLSFRCSLADFQIEKKIGRGQFSEVYKATCLLDRKT
 VALKKVQIFEMMDAKARQDCVKEIGLLKQLNHPNI IKYLDSFIEDNELNIVLELADAGDLSQMIKYFKKQ
 KRLIPERTVWKYFVQLCSAVEHMHSSRRVMHRDIK PANVITATGVVKLGDLGLGRFFSSETTAAHSLVGT
 PYYMSPERIHENGYNFKSDIWSLGCLLYEMAALQSPFYGDKMNLFSLCQKIEQCDYPPLPGEHYSEKLRE
 LVSMCICPDPHQRPDIGYVHVQAKQMHIWMSST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6146_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_014397

ORF Size: 939 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_014397.3](#), [NP_055212.2](#)

RefSeq Size: 2645 bp

RefSeq ORF: 942 bp

Locus ID: 10783

UniProt ID: [Q9HC98](#)

Cytogenetics: 9q33.3

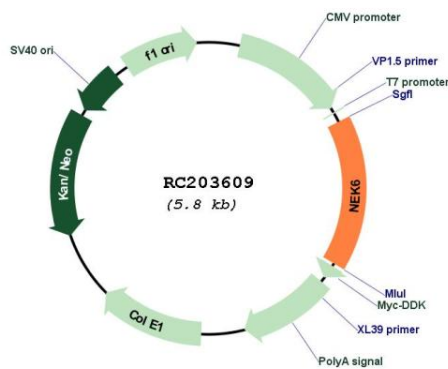
Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

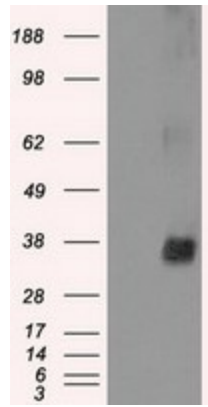
MW: 35.7 kDa

Gene Summary: The protein encoded by this gene is a kinase required for progression through the metaphase portion of mitosis. Inhibition of the encoded protein can lead to apoptosis. This protein also can enhance tumorigenesis by suppressing tumor cell senescence. Several transcript variants encoding a few different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

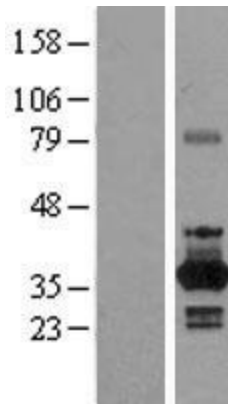
Product images:



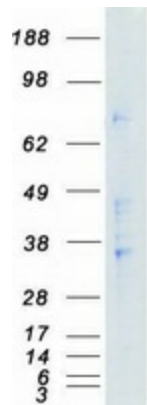
Circular map for RC203609



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NEK6 (Cat# RC203609, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NEK6 (Cat# [TA500545]). Positive lysates [LY402327] (100ug) and [LC402327] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431847]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228819] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NEK6 protein (Cat# [TP303609]). The protein was produced from HEK293T cells transfected with NEK6 cDNA clone (Cat# RC203609) using MegaTran 2.0 (Cat# [TT210002]).