

Product datasheet for **MG217007**

Nek6 (NM_021606) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nek6 (NM_021606) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Nek6
Synonyms: 1300007C09Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG217007 representing NM_021606
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAGGACAGCCAGCCACATGCCTCATGGAGGGAGCCAAACCACCTCTGCCATGCACTGGGGCCTG
 CACCCCTCCAGACCCACAGAGGCTCCCAAACACCCTGTCTTTTCGCTGCTCACTGGCAGACTTCCAAAT
 TGAGAAGAAGATTGGCCGAGGACAGTTCAGTGAGGTTTACAAGGCCACTTGCCTGCTGGACAGGAAGACA
 GTGGCTCTGAAGAAGGTGCAGATCTTTGAGATGATGGATGCCAAAGCCAGGCAAGACTGTGTCAAGGAAA
 TTGGTCTCCTAAAGCAACTGAACCATCCGAATATCATCAAGTATCTGGACTCCTTCATCGAAGACAATGA
 GCTGAACATTGTGCTGGAGTTGGCTGACGCGGGTACCTCTCACAGATGATCAAGTATTTCAAGAAGCAG
 AAGCGGCTTATCCCTGAGAGGACCGTGTGGAAGTACTTCGTGCAGCTGTGCAGCGCTGTGGAGCAGATGC
 ACTCCCGACGTGTGATGCACCGAGACATCAAGCCCGCAACGTGTTTCATCACAGCTACGGGCATTGTGAA
 GCTTGGTGACCTCGGCCCTGGCCGCTTCTTCAGCTCGGAGACCACTGCGGCCCACTCACTAGTGGGAACA
 CCATACTACATGTCACCCGAGAGAATCCATGAGAATGGCTACAACCTCAAGTCAGACATCTGGTCCCTAG
 GCTGCCTGCTGTATGAGATGGCAGCTCTCCAGAGCCCTTCTATGGAGATAAGATGAATCTCTTCTCCCT
 CTGCCAAAAGATTGAGCAGTGTGACTACCCGCTCTCCCGGGAGAGCACTACTCTGAGAAGCTTCGGGAA
 CTGGTCAGTATGTATCTACCTGACCCTGACCACCGACCTGACATTGTATATGTGCACCAGGTGGCTA
 GACAGATGCACGTCTGGACATCCAGCACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG217007 representing NM_021606
 Red=Cloning site Green=Tags(s)

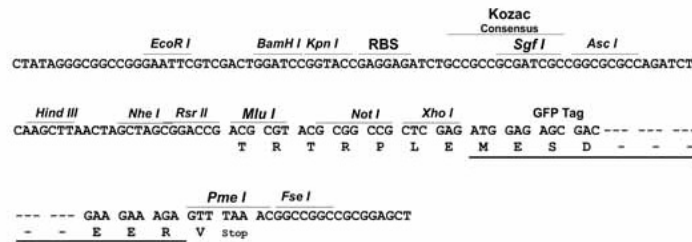
MAGQPSHMPHGGSPNHLCHALGPAPPDPQRLPNTLSFRCSLADFQIEKKIGRGQFSEVYKATCLLDRKT
 VALKKVQIFEMMDAKARQDCVKEIGLLKQLNHPNIKYLDSFIEDNELNIVLELADAGDL SQMIKYFKKQ
 KRLIPERTVWKYFVQLCSAVEHMH SRRVMHRDIK PANVFITATGIVKLGDLGLGRFFSSETTAHSLVGT
 PYYMSPERIHENGYNFKSDIWSLGCLLYEMAALQSPFYGDKMNLFSLCQKIEQCDYPPLPGEHYSEKLR
 LVSMCIYPPDHRPDIYVYVHQVARQMHWTSST

TRTRPLE - GFP Tag - V

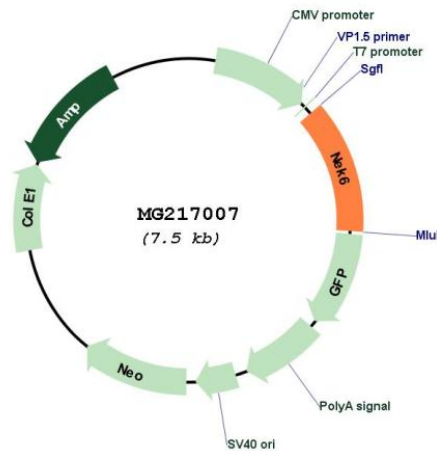
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_021606

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:	<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_021606.3 , NP_067619.1
RefSeq Size:	3168 bp
RefSeq ORF:	942 bp
Locus ID:	59126
UniProt ID:	Q9ES70
Cytogenetics:	2 24.41 cM
Gene Summary:	Protein kinase which plays an important role in mitotic cell cycle progression. Required for chromosome segregation at metaphase-anaphase transition, robust mitotic spindle formation and cytokinesis. Phosphorylates ATF4, CIR1, PTN, RAD26L, RBBP6, RPS7, TRIP4, RPS6KB1 and histones H1 and H3. Phosphorylates KIF11 to promote mitotic spindle formation. Involved in G2/M phase cell cycle arrest induced by DNA damage. Inhibition of activity results in apoptosis. May contribute to tumorigenesis by suppressing p53/TP53-induced cancer cell senescence (By similarity). Phosphorylates STAT3.[UniProtKB/Swiss-Prot Function]