

## Product datasheet for MR216306

### Nek9 (NM\_145138) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nek9 (NM_145138) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nek9
Synonyms:	C130021H08Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR216306 representing NM_145138 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGTGTGGGCGAGTACGAGCGACACTGCGATTCCATCAACTCGGACTTCGGAAGCGAGTCCGGGG  
GTGGCGGGGACTCGGGCCCGGGCCCGAGCGCTGTCCAGGGCCGCGAGCCGGCGGGCGGGCGGGAGCA  
GGAGGAGCTGCACTACATCCCCATCCGCTTCTGGGCCGGTGCCTTTGGGGAGGCCACGCTGTACCGC  
CGCACCAGGACGACTCACTGGTGGTGTGAAGGAAGTTGACTTGACCCGGCTATCTGAGAAGGAACGTC  
GAGATGCCCTGAATGAGATTGTATCCTGGCACTGCTACAGCAGACAACATCATTGCCTACTACAACCA  
CTTCATGGACAACACCACCTGCTGATTGAGCTGGAGTACTGTAACGGAGGGAACCTCTATGACAAAATC  
CTTCGTCAGAAGGACAAGTTGTTGGAAGAGAGATGGTGGTGTGGTACCTTTTTTCAGATTGTTTCAGCAG  
TGAGCTGTATTCAAAAGCTGGAATCCTCCATAGAGATATAAAGACATTAATAATTTTTCTGACCAAGGC  
AAATCTGATAAAGCTTGGAGACTATGGCCTAGCAAAGAACTTAATTCTGAGTACTCTATGGCCGAGACA  
CTTGTGGGCACTCCATATTACATGTCTCCAGAGCTTGCCAAGGAGTAAAATAACAATTTCAAGTCTGATA  
TATGGGCACTGGCTGTGTCATTTTGAAGTCTTACTCTGAAAAGAACATTTGATGCTACAAAACCCACT  
CAACCTATGTGTGAAGATCGTGCAGGGAATCCGGGCCATGGAAGTTGACTCGAGTCAAGTATTCTTTGGAA  
CTGATCCAGTTGGTACAGCATGCCTCGACCAGGATCCTGAGCAGAGGCCCGCTGCAGATGCATCCTGG  
ATCTCCCCCTTCTCAGGACCCGAGGAGAGAGATGGAGGAAAAAGTCACTCTGCTCAATGCACCTACAAA  
GAGACCAAGTCAAGCACTGTGACGGAAGCACCATTGCTGTGGTAAACATCACGAACCAAGTGAAGTCTAT  
GTTTGGGGTGGTGGAAAATCCACACCTCAGAAAATTGGACGTCATCAAGAGTGGCTGTAGTCTCGACAGG  
TGTGTGCGGGGAACCCACTTTGCTGTGGTACCCTGGAGAAGGAACTATATACCTGGTGAACATGCA  
AGGGGGCACTAACTTACGGTCAAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAG  
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AGTGTAGAACCCATGCAGCTGAACTTCTCCTCAGCAATCCTGTGGAGCAGGTCTCCTGTGGGGATAAT



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CATGTGGTAGTTCTGACACGAAACAAAGAAGTCTACTCTTGGGGCTGTGGTGAATATGGACGGCTGGGT  
 TGGATTAGAAGAGGATTACTATACACCACAGAGGGTGGATGTTCCAAAGGCCTTAATCATTGTTGCAGT  
 TCAATGTGGCTGTGATGGGACCTTTCTGCTCACTCAGTCAGGCAAAGTGTGGCCTGTGGACTCAATGAG  
 TTCAACAAGCTGGGGCTGAATCAGTGCATGTCTGGAATCATCAACCATGAAGCATACCATGAAGTCCCT  
 ACACAACCTCCTTACCTTGGCCAAACAGTTGTCTTTTACAAAATCCGTACCATTGCCCCAGGCAAGAC  
 TCACACAGCTGCTATTGATGAACGAGGCCGGTTGCTGACTTTTGGCTGTAATAAGTGTGGCAGCTGGT  
 GTTGGGAATTATAAGAAACGCCTGGGAATCAACCTGTTGGGGGGACCCCTTGGCGGAAGCAAGTATTA  
 GGGTCTCGTGTGGCGATGAGTTCACCATTGCTGCCACCGACGATAATCACATCTTTGCCTGGGGTAAATGG  
 TGTAATGGCCGCTGCAATGACTCCACAGAGAGACCACATGGCTCTGATATCTGTACCTCATGGCCT  
 CGGCCTATTTTTGGATCCCTGCATCATGTTCCAGACCTTTCTTGGCGTGGCTGGCACACCATTCTTATTG  
 TTGAGAAAGTGTGAATCCAAGACCATCCGTTCCAATAGCAGTGGCCTGTCCATCGAACTGTGGTTCA  
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 GCGTTTTACAGTCTGAGAAGGACACGCTGCCCTATGAAGAGCTCAGGGACTCAAGGTCGCATCTGAAG  
 TTCTCCGGAGCCCCAGCGTGCAGCAGGAGCCTGGCCCCCTCGGCTGGATCCTGCAGTGCCGTGTGTTGG  
 GAAAGCCCTGACCTCTGCTGCTTGTGCGTGCAGTCTCTGCAGGTGGAGGTTGACAGGTTGCAGGCTCTG  
 GTGTTAAAGTGTCTGGAAGAACAGCAGAAGCTCCAGCAAGAAAACCTCCAGATGTTTACCAACTACAAA  
 AGCTCAACAAGAAATGGAAGGAGGCCAGCAGGTGGGGATGCACTCCAGAGGAACCCAGACAGCAAAAGGA  
 AGAAATGGAATGGATCCAAAGCCTGACTTAGACTCGGAGTCTGGTGCCTCCTCGGAACAGACTCTGT  
 CGACCCAGCCTC

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGAT AAGTTTAA

**Protein Sequence:**

>MR216306 representing NM\_145138  
 Red=Cloning site Green=Tags(s)

MSVLGEYERHCDINSDFGSESGGGSDSGPSPAVPGPRAGGAAEQEELHYIPIRVLGRGAFGEATLYR  
 RTEDDSLIVVKEVDLTRLSEKERRDALNEIVILALLQHDNIIAYYNHFMNTLLIELEYCNGNLYDKI  
 LRQKDKLFEEEMVWYLFQIVSAVSCIHKAGILHRDIKTLNIFLTKANLKLGDYGLAKKLNSEYSMAET  
 LVGTPYYMSPQLCQGVKYNFKSDIWAAGCVIFELLTLKRTFDATNPLNLCVKIVQGIRAMEVDSSQYSLE  
 LIQLVHACLDDQPEQRPAADALLDLPLLRTRRREMEEKVTLNAPTKRPRSSTVTEAPIAVVTSRTSEVY  
 VWGGGKSTPQKLDVIKSGCSARQVCAGNTHFAVVTVEKELYTWVNMQGGTKLHGQLGHGDKASYRQPKHV  
 EKLGKAIHQVSCGDDFTVCVTDEGQLYAFGSDYYGCMGVKVSQPEVLEPMQLNFFLSNPVEQVSCGDN  
 HVVVLTRNKEVYSWGCGEYGRGLDSEEDYYTPQRVDVPKALIIIVAVQCGCDGTFLLTQSGKVLACGLNE  
 FNKLGLNQCMSEGINHEAYHEVPYTTSTFLAKQLSFYKIRTIAPGKTHAAIDERGRLLTFGCNKCGQLG  
 VGNYYKRLGINLLGGPLGGKQVIRVSCGDEFTIAATDDNHI FAWNGNGNRLAMTPTERPHGSDICTSWP  
 RPIFGSLHHVPLSCRGWHTILIVEKVLNSKTI RSNSSGLSIGTVVQSSSPGGGIGGGGGGGGGGGEE  
 DSQQESETPDPSGGFRGTMEADRMEGLISPTAEVGNNSCGASSSCPGLRKELENAEIPMPDSPAPLSA  
 AFSQSEKDTLPYEELQGLKVASEVPEPQRAAGAWPPRLDPAVPCVKGAL TSAACACSALQVEVDRLQAL  
 VLKCLEEQQLQENLQMF TQLQKLNKLEGGQQVGMHSRGTQTAKEEMEMDPKPDLDSESWCLLGTDC  
 RPSL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9009\\_c10.zip](https://cdn.origene.com/chromatograms/mm9009_c10.zip)

**Restriction Sites:**

Sgfl-MluI



**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\\_145138.2](#), [NP\\_660120.2](#)

**RefSeq Size:** 5403 bp

**RefSeq ORF:** 2955 bp

**Locus ID:** 217718

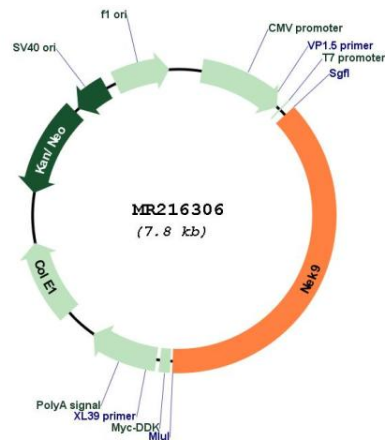
**UniProt ID:** [Q8K1R7](#)

**Cytogenetics:** 12 D1

**MW:** 107.6 kDa

**Gene Summary:** Pleiotropic regulator of mitotic progression, participating in the control of spindle dynamics and chromosome separation. Phosphorylates different histones, myelin basic protein, beta-casein, and BICD2. Phosphorylates histone H3 on serine and threonine residues and beta-casein on serine residues Important for G1/S transition and S phase progression. Phosphorylates NEK6 and NEK7 and stimulates their activity by releasing the autoinhibitory functions of Tyr-108 and Tyr-97 respectively (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR216306