

## Product datasheet for **RG216021**

### NEK8 (NM\_178170) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NEK8 (NM_178170) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NEK8
Synonyms:	JCK; NEK12A; NPHP9; RHPD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RG216021 representing NM\_178170  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAAGTACGAGCGGATCCGAGTGGTGGGAGAGGTGCCTTCGGATTGTGCACCTGTGCCTGCGAA  
 AGGCTGACCAGAAGCTGGTGATCATCAAGCAGATTCCAGTGGAACAGATGACCAAGGAAGAGCGGCAGGC  
 AGCCCAGAATGAGTGCCAGGTCCTCAAGCTGCTCAACCACCCCAATGTCATTGAGTACTACGAGAACTTC  
 CTGGAAGACAAAGCCCTTATGATCGCCATGGAATATGCACCAGGCGGCACTCTGGCTGAGTTCATCCAAA  
 AGCGCTGTAATCCCTGCTGGAGGAGGAGACCATCTGCACCTTCTTCGTGCAGATCTGCTTGCCTGCA  
 TCATGTGCACACCACCTCATCTGCACCAGACCTCAAGACCCAGAACATCCTGCTTGACAAAACCCGC  
 ATGGTCGTCAGATCGGTGATTCGGCATCTCCAAGATCCTTAGCAGCAAGAGCAAGGCCTACACGGTGG  
 TGGGTACCCCATGCTATATCTCCCCTGAGCTGTGTGAGGGCAAGCCCTACAACCAGAAGAGTGACATCTG  
 GGCCTGGGCTGTGCTCTACGAGCTGGCCAGCCTCAAGAGGGCTTTCGAGGCTGCGAACTTGCCAGCA  
 CTGGTGCTGAAGATCATGAGTGGCACCTTTCACCTATCTCTGACCGGTACAGCCCTGAGCTTCGCCAGC  
 TGGTCTGAGTCTACTAGCCTGGAGCCTGCCAGCGGCCACCACTCAGCCACATCATGGCACAGCCCT  
 CTGCATCCGTGCCCTCCTCAACCTCCACACCGAGTGGGCAAGTGTCCGCATGCGGAGGGCAGAGAAGTCC  
 GTGGCCCCCAGCAACACAGGGAGCAGGACCACCACTGTCCGCTGCAGAGGTATCCCCGGGGACCTGTGA  
 GGCCAGCCATCCCACCACCACTGTCTCAGTGTATGCCTGGGGTGGTGGGCTGGGCACCCCTGCGGCT  
 GCCAATGCTCAACACAGAGGTGGTCCAGGTGGCAGCTGGGCGCACGCAGAAAAGCCGGCGTCACGCGCTCT  
 GGGCGTCTCATCTGTGGAGGCCCCACCCCTAGGTGCAGGCGGAGGCAGTCTCCTTCTGGGGCAGTGG  
 AGCAGCCACAGCCCCAGTTCATCTCGCTTTCCTGGAGGGCCAGTCGGGTGTACCATCAAGCACGTGGC  
 CTGTGGGGACTTCTTCACTGCCTGCCTGACTGACAGAGGCATCATCATGACATTCCGCAGCGGCAGCAAT  
 GGGTGCCTAGGCCATGGCAGCCTCACTGACATCAGCCAGCCACCACTTGTGGAGGCTTGTGGGCTATG  
 AAATGGTGCAGGTGGCCTGTGGGCCTCTCACGTGCTGGCCTGTCCACTGAGCGAGAATAATTTGCCTG  
 GGGCCGTGGAGACAGCGGAGACTGGGGCTAGGCACCAGGGAGTCCCACAGCTGCCCCAGCAGGTGCC  
 ATGCCCCCAGGACAGGAAGCTCAGCGAGTTGTATGTGGTATCGATTCTCCATGATCCTCACTGTGCCTG  
 GCCAAGCCCTAGCCTGTGGGAGCAACAGGTTCAACAAGCTGGGCCTGGACCACCTCTCCCTGGGGGAGGA  
 GCCTGTCCCCCACCAGCAAGTGGAGGAGGCCCTGAGCTTCACTACTAGGCTCTGCACCCCTGGACCAG  
 GAGCCTCTGCTGAGTATAGACCTGGGCACTGCTCACTCAGCTGCTGTGACTGCCTCGGGTATTGCTACA  
 CTTTTGGCAGCAATCAGCACGGACAGTTGGGCACCAATACTCGCCGAGGCAGTCGGGCACCCCTGTAAGGT  
 CCAAGGCCTTGAGGGCATCAAGATGGCAATGGTAGCCTGTGGGGATGCCTTCACTGTAGCTATTGGGGCA  
 GAGAGCGAAGTGTACTCTTGGGGCAAAGGGGCGCGAGGTGATTGGGAAGGAGGGATGAGGATGCCGGAC  
 TCCCTCGGCCAGTGCAGTTGGATGAGACACACCCTTACACGGTACTCCGTGCTCCTGTTGCCATGGAAA  
 CACCCTCTGGCTGTTTCGATCGGTCACAGATGAGCCGGTCCCCCCC

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216021 representing NM\_178170  
 Red=Cloning site Green=Tags(s)

```
MEKYERIRVVGRGAFGIVHLCLRKADQKLVIKQIPVEQMTKEERQAAQNECQVLKLLNHPNVIEYYENF
LEDKALMIAMEYAPGGTLAEFIQKRCNSLLEEETILHFFVQILLALHHVHHLILHRDLKTQNILLDKHR
MVKIGDFGISKILSSKSKAYTVVGTTPCYISPELCEGKPYNQKSDI WALGCVLYELASLKRAFEANLPA
LVLKIMSGTFAPISDRYSPELRQLVLSLLSLEPAQRPPLSHIMAQPLCIRALLNLHTDVGSVRMRAEKS
VAPSNTGSRRTTSVRCRGI PRGPVPAIPPLSSVYAWGGGLGTPRLPMLNTEVVQVAAGRQKAGVTRS
GRLILWEAPPLGAGGSLLPGAVEQPQPQFISRFLEGQSGVTIKHVACGDFFTA CLTDRGIIMTFGSGSN
GCLGHGSLTDISQPTIVEALLGYEMVQVACGASHVLALSTERELFAWGRGDSGRLGLGTRESHSCPQQVP
MPPGQEAQRVVCIDSSMILTVPGQALACGSRNFKLGLDHL SLGEEPVPHQVVEALSF TLLGSAPLDQ
EPLL SIDLGT AHSAAVTASGDCYTFGSNQHGQLGTNTRRGRAPCKVQGLEGIKMAMVACGDAFTVAIGA
ESEVYSWGKGARGRLGRRDEDAGLPRPVQLDETHPYTVT SVSCCHGNTLLAVRSVTDEPVPP
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_178170

**ORF Size:** 2076 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\\_178170.3](#)

**RefSeq Size:** 2858 bp

**RefSeq ORF:** 2079 bp

**Locus ID:** 284086

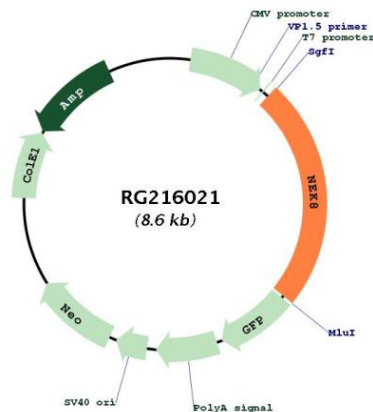
**UniProt ID:** [Q86SG6](#)

**Cytogenetics:** 17q11.2

**Protein Families:** Druggable Genome, Protein Kinase

**Gene Summary:** This gene encodes a member of the serine/threonine protein kinase family related to NIMA (never in mitosis, gene A) of *Aspergillus nidulans*. The encoded protein may play a role in cell cycle progression from G2 to M phase. Mutations in the related mouse gene are associated with a disease phenotype that closely parallels the juvenile autosomal recessive form of polycystic kidney disease in humans. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG216021