

Product datasheet for **RG235252**

NEK1 (NM_001199397) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK1 (NM_001199397) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NEK1
Synonyms:	ALS24; NY-REN-55; SRPS2; SRPS2A; SRTD6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235252 representing NM_001199397 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAAGTATGTTAGACTACAGAAGATTGGAGAAGTTTCATTTGGAAAAGCCATTCTTGTAAATCTA
CAGAAGATGGCAGACAGTATGTTATCAAGGAAATTAACATCTCAAGAATGTCCAGTAAAGAAAGAGAAGA
ATCAAGGAGAGAAGTTGCAGTATTGGCAAACATGAAGCATCCAAATATTGTCCAGTATAGAGAATCATT
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GCTGCAGGTCATCACCATTTTCCTGATGCTGATGATATTAGAAAACTTTGAAAAGATTGAAGGCGGTGT
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ATGATGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235252 representing NM_001199397
 Red=Cloning site Green=Tags(s)

MEKYVRLQKIGEGSFGKAILVKSTEDGRQYVIKEINISRMSSKEREESRREVAVLANMKHPNIVQYRESF
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 DAKEHEKEKSVSSDRKKWEAGGQLVIPLDEL TDTSFSTTERHTVGEVIKLGPNGSPRAWGKSP TDSVL
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 QMSLKLEGNLEEPDDLETEILQEPSG TNKDES L PCTITDVWISSEKETKETQSADRITIQENEVSEDGVS
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 PKNKNKNSLLIGLSTGLFDANNPKMLRTCSLPDL SKLFR LMDVPTVGDVRQDNLEIDEIEDENIKEGPS
 DSEDIVFEETDIDLQELQASMEQLLREQPGEYSEEEESVLKNSDVEPTANGTDVADEDDNPSSESALNE
 EWHSDNSDGEIASECECDSVFNHLEELRLHLEQEMGF EKF FEVYEKIKAIHEDEDENIEICSKIVQNILG
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TRTRPLE - GFP Tag - V

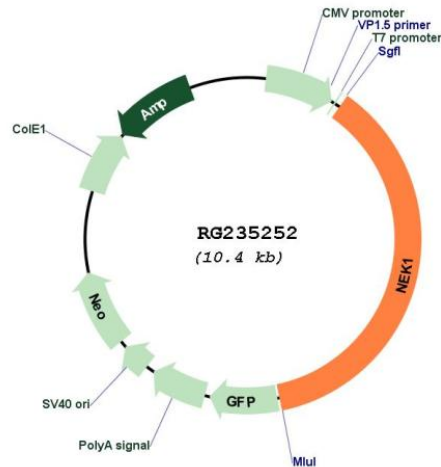
Restriction Sites:

Sgfi-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001199397

ORF Size: 3858 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_001199397.3](#)

RefSeq Size: 5695 bp

RefSeq ORF: 3861 bp

Locus ID: 4750

UniProt ID: [Q96PY6](#)

Cytogenetics: 4q33

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: The protein encoded by this gene is a serine/threonine kinase involved in cell cycle regulation. The encoded protein is found in a centrosomal complex with FEZ1, a neuronal protein that plays a role in axonal development. Defects in this gene are a cause of polycystic kidney disease (PKD). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2010]