OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG235238

NEK1 (NM_001199398) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK1 (NM_001199398) 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:

>RG235238 representing NM_001199398
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAAGTATGTTAGACTACAGAAGATTGGAGAAGGTTCATTTGGAAAAGCCATTCTTGTTAAATCTA
CAGAAGATGGCAGACAGTATGTTATCAAGGAAATTAACATCTCAAGAATGTCCAGTAAAGAAAGAGAAGA
ATCAAGGAGAGAAGTTGCAGTATTGGCAAACATGAAGCATCCAAATATTGTCCAGTATAGAGAATCATTT
GAAGAAAATGGCTCTCTCTACATAGTAATGGATTACTGTGAGGGAGGGGATCTGTTTAAGCGAATAAATG
CTCAGAAAGGCGTTTTGTTTCAAGAGGATCAGATTTTGGACTGGTTTGTACAGATATGTTTGGCCCTGAA
ACATGTACATGATAGAAAAATTCTTCATCGAGACATTAAATCTCAGAACATATTTTTAACTAAAGATGGA
ACAGTACAACTTGGAGATTTTGGAATTGCTAGAGTTCTTAATAGTACTGTAGAGCTGGCTCGAACTTGCA
TAGGGACCCCATACTACTTGTCACCTGAAATCTGTGAAAACAAACCTTACAATAATAAAAGTGACATTTG
GGCTCTGGGGTGTGTCCTTTATGAGCTGTGTACACTTAAACATGCTTTTGAAGCTGGCAGTATGAAAAAC
CTGGTACTGAAGATAATATCTGGATCTTTTCCACCTGTGTCTTTGCATTATTCCTATGATCTCCGCAGTT
TGGTGTCTCAGTTATTTAAAAGAAATCCTAGGGATAGACCATCAGTCAACTCCATATTGGAGAAAGGTTT
TATAGCCAAACGCATTGAAAAGTTTCTCTCTCCTCAGCTTATTGCAGAAGAATTTTGTCTAAAAACATTT
TCGAAGTTTGGATCACAGCCTATACCAGCTAAAAGACCAGCTTCAGGACAAAACTCGATTTCTGTTATGC
CTGCTCAGAAAATTACAAAGCCTGCCGCTAAATATGGAATACCTTTAGCATATAAGAAATATGGAGATAA
AAAATTACACGAAAAGAAACCACTGCAAAAACATAAACAGGCCCATCAAACTCCAGAGAAGAGAGTGAAT
ACTGGAGAAGAAAGGAGGAAAATATCTGAGGAAGCAGCAAGAAAGAGAAGGCTGGAATTTATTGAAAAAG
AAAAGAAACAAAAGGATCAGATTATTAGTTTAATGAAGGCTGAACAAATGAAAAGGCAAGAAAAGGAAAG
GTTGGAAAGAATAAATAGGGCCAGGGAACAAGGATGGAGAAATGTGCTAAGTGCTGGTGGAAGTGGTGAA
GTAAAGGCTCCTTTTCTGGGCAGTGGAGGGACTATAGCTCCATCATCTTTTTCTTCTCGAGGACAGTATG
AACATTACCATGCCATTTTTGACCAAATGCAGCAACAAAGAGCAGAAGATAATGAAGCTAAATGGAAAAG
AGAAATATATGGTCGAGGTCTTCCAGAAAGGCAAAAAGGGCAGCTAGCTGTAGAAAGAGCTAAACAAGTA

View online »

GAAGAGTTCCTGCAGCGAAAACGGGAAGCTATGCAGAATAAAGCTCGAGCCGAAGGACATATGGGAATCC
TGCAAAACCTGGCAGCTATGTATGGAGGCAGGCCCAGCTCTTCAAGAGGAGGGAAGCCAAGAAACAAAGA
GGAAGAGGTTTATCTGGCAAGACTGAGGCAAATAAGACTACAGAATTTCAATGAGCGCCAACAGATTAAA
GCCAAACTTCGTGGTGAAAAGAAAGAAGCTAATCATTCTGAAGGACAAGAAGGAAGTGAAGAGGCTGACA
TGAGGCGCAAAAAAATCGAATCACTGAAGGCCCATGCAAATGCACGTGCTGCTGTACTAAAAGAACAACT
AGAACGAAAGAGAAAGGAGGCTTATGAGAGAGAAAAAAAAGTGTGGGAAGAGCATTTGGTGGCTAAAGGA
GTTAAGAGTTCTGATGTTTCTCCACCTTTGGGACAGCATGAAACAGGTGGCTCTCCATCAAAGCAACAGA
TGAGATCTGTTATTTCTGTAACTTCAGCTTTGAAAGAAGTTGGCGTGGACAGTAGTTTAACTGATACCCG
GGAAACTTCAGAAGAGATGCAAAAGACCAACAATGCTATTTCAAGTAAGCGAGAAATACTTCGTAGATTA
AATGAAAATCTTAAAGCTCAAGAAGATGAAAAAGGAAAGCAGAATCTCTCTGATACTTTTGAGATAAATG
TTCATGAAGATGCCAAAGAGCATGAAAAAGAAAAATCAGTTTCATCTGATCGCAAGAAGTGGGAGGCAGG
AGGTCAACTTGTGATTCCTCTGGATGAGTTAACACTAGATACATCCTTCTCTACAACTGAAAGACATACA
GTGGGAGAAGTTATTAAATTAGGTCCTAATGGATCTCCAAGAAGAGCCTGGGGGAAAAGTCCGACAGATT
CTGTTCTAAAGATACTTGGAGAAGCTGAACTACAACTTCAGACAGAACTATTAGAAAATACAACTATTAG
AAGTGAGATTTCTCCCGAAGGGGAAAAGTACAAACCCTTAATTACTGGAGAAAAAAAAGTACAATGTATT
TCACATGAAATAAACCCATCAGCTATTGTTGATTCTCCTGTTGAGACAAAAAGTCCCGAGTTCAGTGAGG
CATCTCCACAGATGTCATTGAAACTGGAAGGAAATTTAGAAGAACCTGATGATTTGGAAACAGAAATTCT
ACAAGAGCCAAGTGGAACAAACAAAGATGAGAGCTTGCCATGCACTATTACTGATGTGTGGATTAGTGAG
GAAAAAGAAACAAAGGAAACTCAGTCGGCAGATAGGATCACCATTCAGGAAAATGAAGTTTCTGAAGATG
GAGTCTCGAGTACTGTGGACCAACTTAGTGACATTCATATAGAGCCTGGAACCAATGATTCTCAGCACTC
TAAATGTGATGTAGATAAGTCTGTGCAACCGGAACCATTTTTCCATAAGGTGGTTCATTCTGAACACTTG
AACTTAGTCCCTCAAGTTCAATCAGTTCAGTGTTCACCAGAAGAATCCTTTGCATTTCGATCTCACTCGC
ATTTACCACCAAAAAATAAAAACAAGAATTCCTTGCTGATTGGACTTTCAACTGGTCTGTTTGATGCAAA
CAACCCAAAGATGTTAAGGACATGTTCACTTCCAGATCTCTCAAAGCTGTTCAGAACCCTTATGGATGTT
CCCACCGTAGGAGATGTTCGTCAAGACAATCTTGAAATAGATGAAATTGAAGATGAAAACATTAAAGAAG
GACCTTCTGATTCTGAAGACATTGTGTTTGAAGAAACTGACACAGATTTACAAGAGCTGCAGGCCTCGAT
GGAACAGTTACTTAGGGAACAACCTGGTGAAGAATACAGTGAAGAAGAAGAGTCAGTCTTGAAGAACAGT
GATGTGGAGCCAACTGCAAATGGGACAGATGTGGCAGATGAAGATGACAATCCCAGCAGTGAAAGTGCCC
TGAACGAAGAATGGCACTCAGATAACAGTGATGGTGAAATTGCTAGTGAATGTGAATGCGATAGTGTCTT
TAACCATTTAGAGGAACTGAGACTTCATCTGGAGCAGGAAATGGGCTTTGAAAAATTCTTTGAGGTTTAT
GAGAAAATAAAGGCTATTCATGAAGATGAAGATGAAAATATTGAAATTTGTTCAAAAATAGTTCAAAATA
TTTTGGGAAATGAACATCAGCATCTTTATGCCAAGATTCTTCATTTAGTCATGGCAGATGGAGCCTACCA
AGAAGATAATGATGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

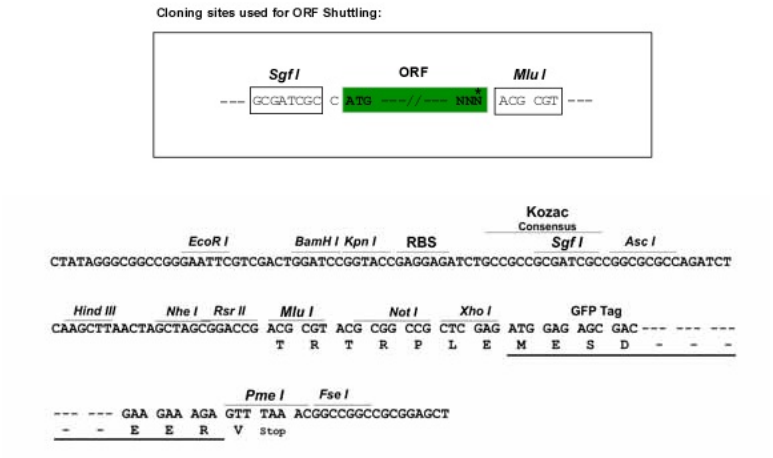
>RG235238 representing NM_001199398
Red=Cloning site Green=Tags(s)

MEKYVRLQKIGEGSFGKAILVKSTEDGRQYVIKEINISRMSSKEREESRREVAVLANMKHPNIVQYRESF
EENGSLYIVMDYCEGGDLFKRINAQKGVLFQEDQILDWFVQICLALKHVHDRKILHRDIKSQNIFLTKDG
TVQLGDFGIARVLNSTVELARTCIGTPYYLSPEICENKPYNNKSDIWALGCVLYELCTLKHAFEAGSMKN
LVLKIISGSFPPVSLHYSYDLRSLVSQLFKRNPRDRPSVNSILEKGFIAKRIEKFLSPQLIAEEFCLKTF
SKFGSQPIPAKRPASGQNSISVMPAQKITKPAAKYGIPLAYKKYGDKKLHEKKPLQKHKQAHQTPEKRVN
TGEERRKISEEAARKRRLEFIEKEKKQKDQIISLMKAEQMKRQEKERLERINRAREQGWRNVLSAGGSGE
VKAPFLGSGGTIAPSSFSSRGQYEHYHAIFDQMQQQRAEDNEAKWKREIYGRGLPERQKGQLAVERAKQV
EEFLQRKREAMQNKARAEGHMGILQNLAAMYGGRPSSSRGGKPRNKEEEVYLARLRQIRLQNFNERQQIK
AKLRGEKKEANHSEGQEGSEEADMRRKKIESLKAHANARAAVLKEQLERKRKEAYEREKKVWEEHLVAKG
VKSSDVSPPLGQHETGGSPSKQQMRSVISVTSALKEVGVDSSLTDTRETSEEMQKTNNAISSKREILRRL
NENLKAQEDEKGKQNLSDTFEINVHEDAKEHEKEKSVSSDRKKWEAGGQLVIPLDELTLDTSFSTTERHT
VGEVIKLGPNGSPRRAWGKSPTDSVLKILGEAELQLQTELLENTTIRSEISPEGEKYKPLITGEKKVQCI
SHEINPSAIVDSPVETKSPEFSEASPQMSLKLEGNLEEPDDLETEILQEPSGTNKDESLPCTITDVWISE
EKETKETQSADRITIQENEVSEDGVSSTVDQLSDIHIEPGTNDSQHSKCDVDKSVQPEPFFHKVVHSEHL
NLVPQVQSVQCSPEESFAFRSHSHLPPKNKNKNSLLIGLSTGLFDANNPKMLRTCSLPDLSKLFRTLMDV
PTVGDVRQDNLEIDEIEDENIKEGPSDSEDIVFEETDTDLQELQASMEQLLREQPGEEYSEEEESVLKNS
DVEPTANGTDVADEDDNPSSESALNEEWHSDNSDGEIASECECDSVFNHLEELRLHLEQEMGFEKFFEVY
EKIKAIHEDEDENIEICSKIVQNILGNEHQHLYAKILHLVMADGAYQEDNDE

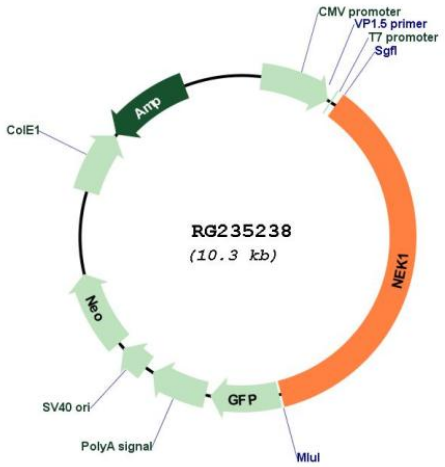
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001199398
ORF Size:	3726 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_001199398.2
RefSeq Size:	5563 bp
RefSeq ORF:	3729 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]