

Product datasheet for **RG221729**

NEK1 (NM_012224) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK1 (NM_012224) 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:	>RG221729 representing NM_012224 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAAGTATGTTAGACTACAGAAGATTGGAGAAGGTTCAATTTGGAAAAGCCATTCTTGTAAATCTA
CAGAAGATGGCAGACAGTATGTTATCAAGGAAATTAACATCTCAAGAATGTCCAGTAAAGAAAGAGAAGA
ATCAAGGAGAGAAGTTGCAGTATTGGCAAACATGAAGCATCCAAATATTGTCCAGTATAGAGAATCATT
GAAGAAAATGGCTCTCTACATAGTAATGGATTACTGTGAGGGAGGGGATCTGTTAAAGCGAATAAATG
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GCTGCAGGTCATCACCATTTTCCTGATGCTGATGATATTAGAAAACTTTGAAAAGATTGAAGGCGGTGT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221729 representing NM_012224
 Red=Cloning site Green=Tags(s)

MEKYVRLQKIGEGSFGKAILVKSTEDGRQYVIKEINISRMSSKEREESRREAVLANMKHPNIVQYRESF
 EENGLYIVMDYCEGGDLFKRINAQKGVLFQEDQILDWFVQICLALKHVHDKILHRDIKSQNIPLTKDG
 TVQLGDFGIARVNSTVELARTICIGTPYYLSPEICENKPYNNKSDI WALGCVLYELCTLKHAFEAGSMKN
 LVLKIIISGSFPPVSLHYSYDLRSLVSQLFKRNPDRPSVNSILEKGFIAKRIEKFLSPQLIAEEFCLKTF
 SKFGSQPIPAKRPASGQNSISVMPAQKITKPAKYGIPLAYKKGDKLHEKKPLQKHKQAHQTPEKRVN
 TGEERRKISEEAARKRRLFEIEKEKKQKDQIISLMKAEQMKRQEKERLERINRAREQGWNRNVL SAGGSGE
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 AAGHHFPDADDIRKTLKRLKAVSKQANANRQKGLAVERAKQVEEFQRKREAMQNKARAEGHMVYLAR
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 DELTLDTSFSTTERHTVGEVIKLGPNGSPRRWGWKSPDVSVLKILGEAELQLQTELENTTIRSEISPEG
 EKYKPLITGEKKVQCISHEINPSAIVDSPVETKSEPESEASPQMSLKLEGNLEPPDLETEILQEPSGNT
 KDESLPCTITDVISEEKETKETQSADRITIQENEVSEDGVSSTVDQLSDIHIEPGTNDQSQKCDVDS
 VQPEPFFHKVVHSEHLNLPVQVQSVQCSPEESFAFRSHSLPPKNKNKNSLLIGLSTGLFDANNPKMLRT
 CSLPDL SKLFRITLMDVPTVGDVRQDNLEIDEIENIKEGPSDSEDIVFEETDIDLQELQASMEQLLREQ
 PGEEYSEEEESVLKNSDVEPTANGTDVADEDDNPSSSALNEEWHSDNSDGEIASECECDVFNHLEELR
 LHLEQEMGFEEKFEVYEKIKAIHEDEDENIEICKIVQNILGNEHQHLYAKILHLVMADGAYQEDNDE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

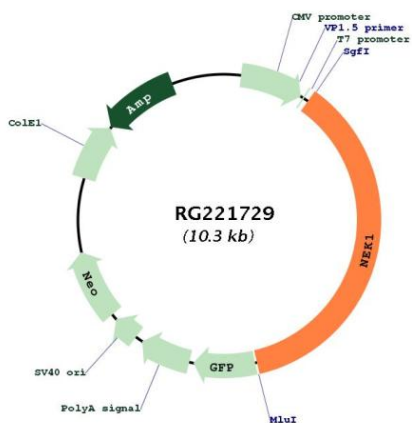


ACCN: NM_012224

ORF Size: 3774 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_012224.4
RefSeq Size:	5501 bp
RefSeq ORF:	3777 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]

Product images:



Circular map for RG221729