

Product datasheet for **SC323341**

NEK1 (NM_012224) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEK1 (NM_012224) Human Untagged Clone
Tag:	Tag Free
Symbol:	NEK1
Synonyms:	ALS24; NY-REN-55; SRPS2; SRPS2A; SRTD6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323341 sequence for NM_012224 edited (data generated by NextGen Sequencing)

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ATGGAGAAGTATGTTAGACTACAGAAGATTGGAGAAGGTTTCATTTGGAAAAGCCATTCTT
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Clone variation with respect to NM_012224.2
98 a=>t;178 c=>a

5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_012224 unedited CCGCCCGTTGAGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA CCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGAGAGAAGTCT CGAACGCCGCCGTCACCCACCCCGCCGTGGCCACTAGCAACGACCTCTGTGAAGTTGGAGAGGCGGTAAC GGAGGCACTCCCCTGCTGCACCCCGCCGTTTCTACGGGGCTCAGAAAACAGTTTGTGTTGTTTCGTCG GGGTAGTGTGACCCCTGCTTTACGGGCGTCGCCCCGAGACCAGGACGGGAGTCAAACCCGTGGTATCAA CTTGAGGACGAGTGCAGGATGTCATTTTTCAAATGGCGGGGATGGTCCCTCTGCTTTATTAAGCCCCG GTGGGAAGAACTGGCCACCTAGCCTGGTGGCTTATTGGTCATCACCCGTTTTTCTACTACCGTCTGGG GTAATGGAGTTTTTAAATGGCCTGGCTTACCTGTAAGGTTGCCTTGAAAAGAATCTATGAGAGATTGT TAGACACTACGGGAAATTGGAGAGGTTCAATGGGAAAACCATTTTGTGTTAACTCACGAGAGAGGGCAC AGTTTTGTATCTGGAATTACCCTCTCAGAGAGTCCCGTAGGAGAGAGATCCAGGAAGATTTGCGT ATTGGCAACTGTGAATCACAAATGTCCGATGGGATCATTGAGAAATGCTCTCACAGTATGGGATCT GGAGAGGAGTGTGTACAATATGCTCGAAGCCTGTCAAGATCAATTGCCGTGTACAATGTGCGACGCTCTCG AACTCTCGCATATCGACACTCTCATGAGACCCTGGGAAGTGGATGTGCGTTCTCTATATCGGG
Kinase Domain Sequence:	>SC323341 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CSATGMGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGAGAGAAGTCTCGAAC GCCGCCGTCACCCACCCCGCCGTGGCCACTAGCAACGACCTCTGTGAAGTTGGAGAGGCGGTAACGGAGG CACTCCCCTGCTGCACCCCGCCGTTTCTACGGGGCTCAGAAAAC
Restriction Sites:	Please inquire
ACCN:	NM_012224
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell , 2008 May p536-548.
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_012224.1 , NP_036356.1
RefSeq Size:	5501 bp
RefSeq ORF:	3777 bp

Locus ID:	4750
UniProt ID:	Q96PY6
Cytogenetics:	4q33
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.</p>