

Product datasheet for **RC205740**

NUAK2 (NM_030952) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NUAK2 (NM_030952) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUAK2
Synonyms:	SNARK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205740 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTCGTTGTTTTGCGCGCGCTCCGGCCCACTCCCTCGGCCGAGAGCTAGCCGGCCGCTGG
 CGGAAGGCTGATCAAGTCGCCAAGCCCTAATGAAGAAGCAGGCGGTGAAGCGCACACCACAAAGCA
 CAACCTGCGGCACCGCTACGAGTTCCTGGAGACCTGGGCAAAGGCACCTACGGGAAGGTGAAGAAGCG
 CGGAGAGCTCGGGGCGCTGGTGGCCATCAAGTCAATCCGAAGGACAAAATCAAAGTGAAGATC
 TGATGCACATACGGAGGAGATTGAGATCATGTCACTCAACCACCTCACATCATTGCCATCCATGA
 AGTGTGTTGAGAACAGCAGCAAGATCGTATCGTATGGAGTATGCCAGCCGGGGCAGCTTTATGACTAC
 ATCAGCGAGCGGCAGCAGCTCAGTGAGCGGAAGCTAGGCATTTCTCCGGCAGATCGTCTCTGCCGTGC
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 GGTCCCTGGGTGTTCTCCTCTACATCCTGGTGCATGGCACCATGCCCTTTGATGGGCATGACCATAAGAT
 CCTAGTAAACAGATCAGCAACGGGGCCTACCGGGAGCCACCTAAACCCTCTGATGCCTGTGGCCTGATC
 CGGTGGCTGTTGATGGTGAACCCACCCGCCGGGCCACCTGGAGGATGTGGCAGTCACTGGTGGGTCA
 ACTGGGGCTACGCCACCCGAGTGGGAGAGCAGGAGGCTCCGCATGAGGGTGGGCACCCTGGCAGTGACTC
 TGCCCGCCCTCCATGGTACTGGCTCCGGGCTTCTCCCGCCCCCTCTGGAGAATGGGGCAAGGTG
 TGCAGCTTCTCAAGCAGCATGCACCTGGTGGGGAAGCACCACCCCTGGCCTGGAGCCAGCATTCCG
 TCAAGAAGTCCCGCAAGGAGAATGACATGGCCCAGTCTCTCCACAGTGACACGGCTGATGACACTGCCCA
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 GCTTACGGGCTGCTCCTCCATCGCAAAGGCATCCTCAAACCTCAATGGCAAGTTCCTCCAGACAGCCTTGG
 AGCTCGCGGCCCCACCACCTTCGGCTCCCTGGATGAACCTCGCCCCACCTCGCCCCCTGGCCGGCCAG
 CCGACCCTCAGGGGCTGTGAGCGAGGACAGCATCTGTCTCTGAGTCTTTGACCAGCTGGACTTGCTT
 GAACGGCTCCAGAGCCCCCACTGCGGGGCTGTGTGTCTGTGGACAACCTCACGGGGCTTGAGGAGCCCC
 CCTCAGAGGGCCCTGGAAGCTGCCTGAGGCGCTGGCGGCAGGATCCTTTGGGGGACAGCTGCTTTCCCT
 GACAGACTGCCAGGAGGTGACAGCGACCTACCGACAGGCACTGAGGGTCTGCTCAAAGCTCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

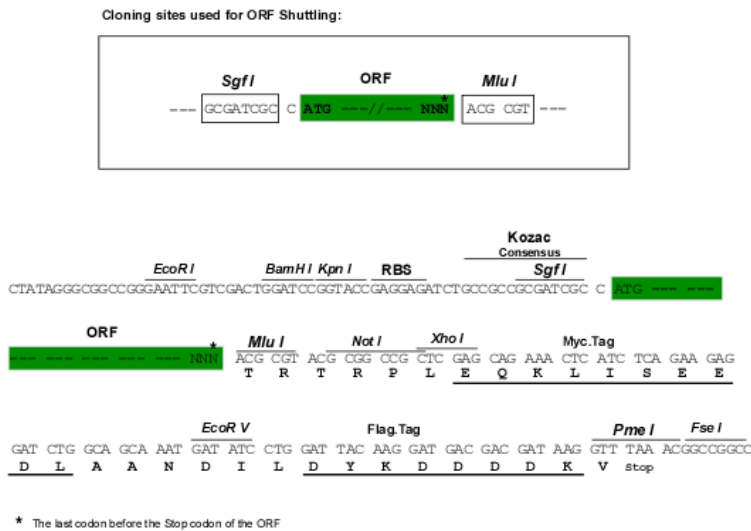
Protein Sequence:

>RC205740 protein sequence
 Red=Cloning site Green=Tags(s)

MESLVFARRSGPTPSAAELARPLAEGLIKSPKPLMKKQAVKRHHHKHNLRHRYEFLETGKGTYGKVKKA
 RESSGRLVAIKSIRKDKIKDEQDLMHIRREIEIMSSLNHPHIIAIEHVFENSSKIVIMEYASRGDLYDY
 ISERQQLSEREARHFFRQIVSAVHYCHQNRVVRDLKLENILLDANGNIKIADFGLSNL YHQGKFLQTFC
 GSPLYASPEIVNGKPYTGPEVDSWSLGVLLYILVHGTMPFDGHDHKILVKQISNGAYREPPKPSDACGLI
 RWLLMVNPTRRATLEDVASHWWVNWGYATRVGEQEAPHEGGHPGSDSARASMADWLRSSRPLENGAKV
 CSFFKQHAPGGGSTTPGLERQHSLKSRKENDMAQSLHSDTADDTAHRPGKSNLKL PKGILKKKVSASAE
 GVQEDPPELSPIPASPQAAPLLPKKGILKPRQRESGYSSPEPSESGELLDAGDV FVSGDPKEQKPPQ
 ASGLLLHRKGIKLNKFSQTALELAAPTTFGSLDELAPRPLARASRPSGAVSEDSILSSESFQQLDLP
 ERLPEPPLRGCVSVDNL TGLEEPPSEPGSCLRRWRQDPLGDSCFSLTDCQEVATYRQALRVCSKLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKVV

Chromatograms: https://cdn.origene.com/chromatograms/mk6199_a06.zip
 Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_030952
 ORF Size: 1884 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.

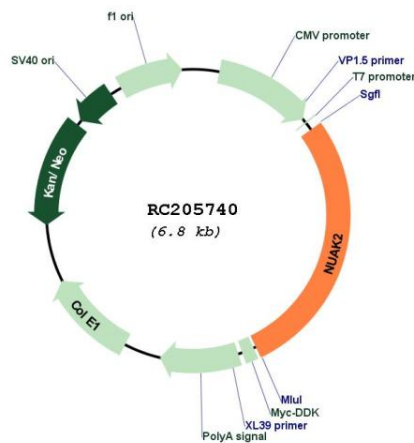
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

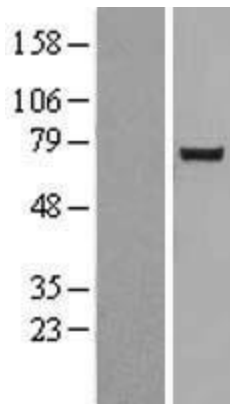
RefSeq: [NM_030952.1](#), [NP_112214.1](#)
 RefSeq Size: 3443 bp
 RefSeq ORF: 1887 bp

Locus ID: 81788
UniProt ID: [Q9H093](#)
Cytogenetics: 1q32.1
Protein Families: Druggable Genome, Protein Kinase
MW: 69.6 kDa
Gene Summary: Stress-activated kinase involved in tolerance to glucose starvation. Induces cell-cell detachment by increasing F-actin conversion to G-actin. Expression is induced by CD95 or TNF-alpha, via NF-kappa-B. Protects cells from CD95-mediated apoptosis and is required for the increased motility and invasiveness of CD95-activated tumor cells. Able to phosphorylate 'Ser-464' of LATS1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC205740



Western blot validation of overexpression lysate (Cat# [LY403100]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205740 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).