

Product datasheet for **RR212466**

Nuak2 (NM_001007617) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nuak2 (NM_001007617) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nuak2
Synonyms:	1200013b22rik; Snark; UV126
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR212466 representing NM_001007617
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTCGGTGGCCTTACACCGCGCGGGAACCTGGCTCCCTCGGCCTCCGCCCTGGCCACGGAGAGCG
 CCCGGCCGCTGGCGGACCGGCTCATCAAGTCGCCCAAACCTCTGATGAAGAAGCAGGCGGTGAAGCGGCA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212466 representing NM_001007617
 Red=Cloning site Green=Tags(s)

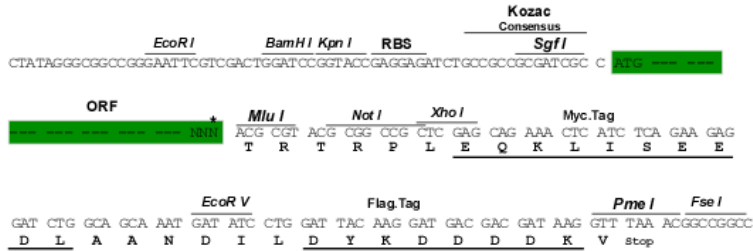
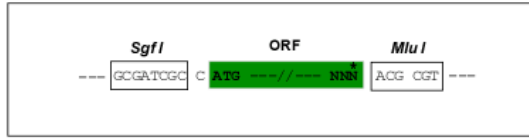
MESVALHRRGNLAPSASALATESARPLADRLIKSPKPLMKQAVKRHHHKHNLRHRYEFLETLGKGTYGK
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 LYDYISERPLNERDARHFFRQIVSALHYCHQNGIVHRDLKLENILLDASGNIKIADFGLSNLYHKGF
 QTFCGSPLYASPEIVNGKPYVGPVDSWSLGVLLYILVHGTMPFDGQDHKTLVKQISSGAYREPCPSDA
 CGLIRWLLMVNPIRRATLEDVASHWVNWGYSTRIGEALREGGHPSGDSGRASMDWLRSSRPLEN
 GAKVCSFFKQHPVGGSTGPGLERQHSLSRKENDMAQTLQNDPAEDTSSRPGKNSLKLPGILKKKAS
 PSSGEVQEGPQELRPVSNTPGQVPVPAIPLPRKILKKSQRQESGYSSPEPSESGELLDAGDVFVSGDP
 MEQKSPQASGRLHRKILKLNKFSRTALEGTAPSTFGSLDQLASPHPTARASRPSGAVSEDSILSSESF
 DQLDLPERLPETPLRGCVSVDNLRRLRLEQPPSEGLKRWWQESLGDSCFSLTDCQEVTAAYRQALGICSKLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

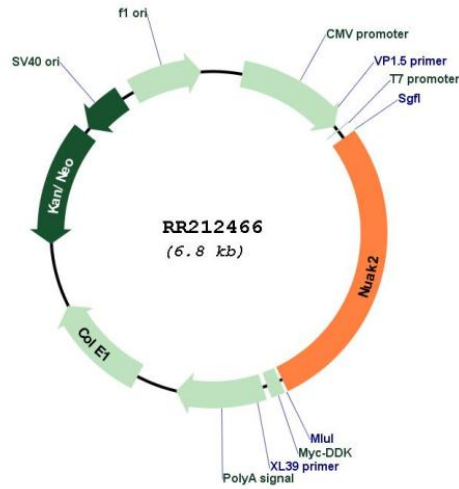
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001007617

ORF Size: 1890 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_001007617.1 , NP_001007618.1
RefSeq Size:	2900 bp
RefSeq ORF:	1893 bp
Locus ID:	289419
UniProt ID:	Q66HE5
Cytogenetics:	13q13
MW:	70 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 (By similarity).[UniProtKB/Swiss-Prot Function]