

## Product datasheet for **MG209612**

### **Nuak2 (NM\_028778) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Nuak2 (NM_028778) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nuak2
Synonyms:	1200013B22Rik; mKIAA0537; Omphk2; Snark
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG209612 representing NM\_028778  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTCGGTGGCCTTACTCCAGCGCCGAGCCAGGCTCCCTCGGCCTCCGCCCTGGCCTCGGAGAGCG  
 CCCGGCCCTGGCGGACGGGCTCATCAAGTCGCCTAAACCTCTGATGAAGAAGCAGGCGGTGAAGCGGCA  
 CCATCACAAACACAACCTGCGGCACCGCTACGAGTTCCTGGAGACCCTGGGCAAGGGCACCTACGGGAAG  
 GTGAAGAAGGCACGAGAGAGCTCGGGCGTCTGGTGGCCATCAAGTCAATCAGGAAAGACAAAATCAAAG  
 ATGAGCAGGATCTGCTGCACATACGGAGGGAGATTGAGATCATGTCTTCACTCAACCACCCCCACATCAT  
 TGCCATCCATGAAGTGTGAGAATAGCAGCAAGATTGTGATTGTCATGGAGTATGCCAGCCGAGGCGAT  
 CTGTACGATTACATCAGTGAGCGGCCACGGCTGAGTGAGCGGGACGCCAGGCATTTCTCCGACAGATCG  
 TGTCTGCCCTGCACTACTGCCACCAGAACGGGATCGTTACAGAGATCTCAAGCTGGAAAACATCCTTCT  
 AGATGCCAATGGAAACATCAAGATTGCTGACTTTGGCCTCTCAAACCTGTACCACAAAGGCAAGTTCCTC  
 CAGACGTTCTGTGGGAGCCCTCTACGCCTCGCCTGAGATAGTCAACGGGAAGCCCTATGTGGGCCAG  
 AGGTGGACAGCTGGTCTCTGGGCGTTCTCTGTACATCCTGGTGCATGGCACCATGCCCTTTGACGGGCA  
 GGATCATAAAACACTGGTGAAGCAAATCAGTAACGGGGCTTACCGTGAGCCGCCAAGCCGTCCGATGCC  
 TGTGGCCTGATCCGGTGGCTGTTAATGGTGAACCCACCCGTCGGGCCACACTGGAGGATGTAGCCAGTC  
 ATGGTGGGTCAACTGGGGTTACACCACCGGAGTCGGGGAACAGGAAGCCCTGCGTGAGGGTGGGCACCC  
 TAGTGGTGACTCTGGCCGGGCTCCATGGCGGACTGGTTACGTCGCTCCTCGGCCCCCTCCTGGAGAAT  
 GGAGCCAAAGTGTGCAGTCTTCAAGCAGCACGTGCCGGGAGGTGGAAGCACCGTACCTGGCCTGGAGC  
 GGCAACATTTCTTAAGAAGTCCGAAAAGGAGAATGACATGGCTCAGAATCTGCAAGGTGACCCGGCTGA  
 GGATACCTCTTCTCGTCCTGGCAAGAGCAGCCTTAAGCTTCAAAAAGGCATTCTCAAGAAAAAGTCTCT  
 ACCTCTCAGGGGAGGTACAGGAGGACCCTCAGGAACTCAGACCGGTGCCTGATACTCCAGGGCAGCCTG  
 TCCCTGTGTATCCCTGTCCCAAGGAAAGGCATCCTTAAGAAGTCTCGACAGCGTGAATCTGGTACTA  
 CTCCTCTCCAGAGCCAGCGAGTCTGGGAACTCTTAGACGCCAGTGATGTGTTGTGAGTGGGGACCC  
 GTGGAGCAGAAGTCTCCACAGGCTTCAAGGCTCCTCCACCGCAAGGGCATTCTCAAACCTCAATGGCA  
 AGTTCTCCCGCACAGCCTTAGAAGGCACTACCCCTAGCACCTTTGGCTCCCTGGACCAACTGGCCTCCTC  
 CCATCCTGCAGCCCGGCCAGCCGCCCTCAGGGGCTGTGAGTGAGGACAGCATCTGTCTCCGAGTCC  
 TTTGACCAATTGGACTTGCTGAAGTCTTCCGAAACCCCACTGAGGGGCTGTGTGTCTGTGGACAACC  
 TGAGGGGGCTTGAGCAGCCTCCCTCAGAAGGTCTGAAGCGATGGTGGCAGGAATCCTTGGGGGATAGCTG  
 CTTTTCTGTGACAGACTGTCAAGAGGTGACTGCAGCCTACAGACAAGCCCTAGGAATCTGCTCGAAGCTC  
 AGC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209612 representing NM\_028778  
 Red=Cloning site Green=Tags(s)

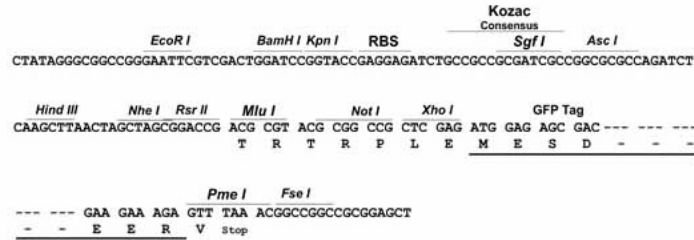
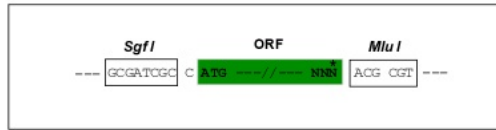
MESVALLQRPSQAPSASALASESARPLADGLIKSPKPLMKQAVKRHHKHNLRHRYEFLETGKGTYGK  
 VKKARESSGRLVAIKSIRKDKIKDEQDLLHIRREIEIMSSLNHPHIIAIEHFENSISKIVIMEYASRGD  
 LYDYISERPRLSERDARHFFRQIVSALHYCHQNGIVHRDLKLENILLDANGNIKIADFLSNLYHKGKFL  
 QTFCGSPLYASPEIVNGKPYVGPVDSWSLGVLLYILVHGTMPFDGQDHKTLVKQISNGAYREPPKPSDA  
 CGLIRWLLMVNPTRRATLEDVASHWVNWGYTTGVGEQEALREGGHPSGDSGRASMDWLRSSRPLEN  
 GAKVCSFFKQHVPGGGSTVPLERQHSLKSRKENDMAQNLQGDPAEDTSRPGKSSLKLPKGILKKS  
 TSSGEVQEDPQELRPVDPDPQVPVAVSLLPRKGILKSRQRESGYSSPEPSESGELLDASDVFVSGDP  
 VEQKSPQASGLLLHRKGILKLNKFSRTALEGTPSTFGSLDQLASSHPAARPSRPSGAVSEDSILSSES  
 FDQLDLPERLPETPLRGCVSVDNLRGLQEPPSEGLKRWWQESLGDSCFSLTDCQEVTAAYRQALGICSKL  
 S

**TRTRPLE** – GFP Tag – V

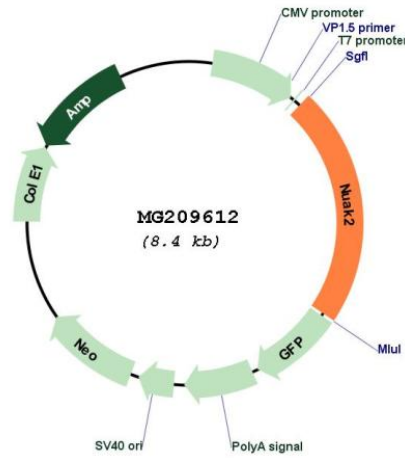
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_028778

ORF Size: 1893 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_028778.3</a> , <a href="#">NP_083054.1</a>
<b>RefSeq Size:</b>	3108 bp
<b>RefSeq ORF:</b>	1896 bp
<b>Locus ID:</b>	74137
<b>UniProt ID:</b>	<a href="#">Q8BZN4</a>
<b>Cytogenetics:</b>	1 E4
<b>Gene Summary:</b>	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]