

## Product datasheet for **MG217978**

### **Nckap1 (NM\_016965) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nckap1 (NM_016965) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nckap1
Synonyms:	C79304; H19; Hem-2; Hem2; mh19; mKIAA0587; Nap1; p125Nap1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217978 representing NM_016965 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGCTCCGTGCTGCAGCCAGTCAGCAGAAGCTGGCGGAGAAGCTCACCATCCTCAACGACCGGG  
GCGTCGGCATGCTCACGCGCCTACAACATCAAGAAGGCATGTGGCGACCCCAAGGCTAAACCTCCTA  
CCTTATTGACAAAACCTGGAATCTGCTGTGAAATTCATAGTCAGAAAATTTCTGCTGTAGAAACGCGC  
AACAAATCAACAGCTGGCACAGCTACAGAAAAGAAAAATCAGAGATTCTGAAAAATCTGGCGTTGTATT  
ACTTTACATTTGTAGATGTTATGGAATTAAGGACCATGTCTGTGACTTGTGAATACTATTGACGTTTG  
CCAAGTCTTTGATATTACTGTGAACCTTGATTTAACAAAGAACTACTTAGACTTGACTGTAACCTAT  
ACAACATTAATGATACTGCTGTCCCGGATTGAAGAACGGAAGCAATCATTGGACTATACAATTATGCAC  
ATGAAATGACCCATGGAGCAAGTGACCGAGAATATCCACGCTTGGTCAGATGATTGTGGACTATGAAAA  
CCCTTTAAAAAGATGATGGAAGAATTTGTACCCCATAGCAAGTCTTTTCAGATGCGCTAATTTCTCTT  
CAGATGGTGTATCCTAGACGGAACCTTTCAGCAGACCAGTGGAGGAATGCCAGTTGCTGAGTCTCATCA  
GTGCACCCAGCACAATGCTTAATCCTGCGCAGTCGGACACTATGCCTTGTGAATATCTCTCTTGGATGC  
AATGGAGAAATGGATCATCTTTGGCTTTATTCTGTGCCATGGGATGCTAAATACGGAGGCTACCGCACTG  
AACCTTTGGAAGCTAGCTCTTCAGAGTAGCTCTTGCCCTCTCTCTTTTCGGGATGAAGTTTTCCACATTC  
ACAAAGCTGCAGAAGACTTATTTGTAACATTCGGGGCTACAATAAACGATTAACGACATAAGAGAATG  
CAAGGAGCGCGGTGATCCCACGCGGCTCAATGCACAGAGAAAAGACGCAAGTTTTTACGGTCTGCACTA  
AAAGAAGTGGCCACTGTCTCTGTACCAGCCTGGCCTGCTTGGTCCCAAGGCACTTTTTGTTTTCATGG  
CGTTATCTTTGCCCGTATGAAATTACTGGCTGCTCCGTCACGCGGACAACATGCCAAAGAAGAGTGC  
AGATGACTTTATAGATAAGCACATTGCTGAGCTAATATTTACATGGAAGAGCTTAGAGCACATGTCAGG  
AAGTATGGCCTGTCATGCAGAGGTAACGTCGAATACCTCTCTGGCTTTGATGCTGTTGCTCCTCAATG  
AAGTGTGCAGAACCTGTCTGTTTGCCTGAGGATGAATCGATCATCATGCTCTTTTGTGAACACCAT  
GACCTCCCTAAGTGTGAAGCAAGTTGAAGATGGAGAAGTGTGATTTTCAGAGGATGAGATTAGATTGG



[View online »](#)

TTTAGGTTACAGGCGTACACTAGCGTCTCCAAAGCTTCACTTAGCCTTGAGATCACAGAGAACTTGAA  
 AGATGATGAACACAATCATATCCATACAAAAATGGTAGATTCCTTGGTTGAAATGTTGGTGGAAACATC  
 CGATCTCTCCATATTTTGTTTTACAGCCGTGCTTTTGAGAAGATGTTTCAGCAGTGCTTGGAGCTGCC  
 TCTCAGTCAAGATACTCCATTGCCTTTCCTCTGCTCTGCACTCACTTCATGAGCTGCACACATGAACTGT  
 GTCCTGAAGAGCGCCATCATATAGGAGATCGTAGCCTTTCCTGTGCAATATGTTCTGGATGAGATGGC  
 CAAACAAGCTCGAAATCTCATCCCGATATTTGCACAGAACAGTACTCTTAGTGACCAGTTATTGCCG  
 AAGCATTTGTCAAAACCATCAGTCAAGCAGTGAATAAGAAGTCAAAAAACAGACGGGCAAGAAGGGG  
 AACCTGAAAGGGAAAAACCGGGTGGAGAGCATGAGGAAAAACAGGCTGGTAGTACCACCTTGATAA  
 GTTGACACTGCACTTTCGGAGTTATGCTTCTCCATAAATTATGTTCCAAACATGGCGGTGGGAGCAC  
 ACCTTCACGCCGAGGAGTATTTGACTTCTCATCTGAAAATCCGTTCACTAAATCAATTGTTGGAATGA  
 CTATGTATAATCAAGCTACACAGGAAATGCAAAGCCATCAGAGCTTCTAACAAGCGTAAGAGCATAT  
 GACTGTACTCCAGTCCATAGAGAACTATGTGCAGATTGATATCACCAGAGATTTAATAATGCTCTTCT  
 CAGCAAACACAACACTTAGACAGCCATGGAGAACCAACCATCACGAGTCTGTATACAACTGGTACTTGG  
 AAACCTTTATTAAGACAAGTCAGCAATGGCCATATAGCTTATTTCTGCAATGAAAGCATTGTGAAATTT  
 ACCCACAGAAAAATGAATTAACATTCAATGCAGAGGAATATTCTGATATATCAGAAATGAGATCATTATCA  
 GAGCTCCTAGGCCATATGGGATGAAGTTCCTGAGTGAGAGCCTTATGTGGCACATTTATCACAAAGTAG  
 CTGAACCTAAGAACTTGTGGTGGAGAATGTTGATGTTCTAACACAAATGAGGACCAGCTTTGACAAACC  
 AGACCAGATGGCTGCACTCTTAAAAGATTATCATCTGTTGACAGTGTCTTGAAGGATGACGATAATT  
 GGTGTTATTTTATCCTTCCGGTCATTGGCACAAGAAGCATTGAGAGATGCTCTGCTACCACATTCCTT  
 TCCTCGTGAGCTCCATTGAAGATTTCAAGGATCACATTCCTCGGAAACTGATATGAAGGTTGCAATGAA  
 TGTGATGAGCTGCTCGGCTGCTGGTTACCATGTGAGATTGATCCTGCCTTAGTCGATGCTCTTTCC  
 TCACAAAAATCAGAGAACATTAGTCCAGAGGAAGAATACAAGATCGTTGCTCCTGATGGTCTTTGTAG  
 CAGTTTCTTGCCTACACTGGCCAGCAATGTAATGTCACAGTACAGCCCTGCAATAGAAGGACAGCA  
 CAATATACATTGTTGGCCAAAGCCATCAACCAGATTGCTGCAGCTTTGTTTACAATTCACAAGGAAGT  
 ATTGAAGACCGACTTAAGGAATTCCTGGCGCTTGCATCATCCAGTCTACTGAAAATTGGCCAAAGAGACAG  
 ATAAAATACAACAAGAAATAGAGAATCTGTTTATTTGCTACTGGATATGATTGTACAAGAATCACCATT  
 CCTGACAAATGGATCTCTTGAATCTTGTTCCTTATGTGTTGCTGAGAAATGCATACCATGCTGTCTAC  
 AAACAAAGTGTACATCTTCTGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG217978 representing NM\_016965  
 Red=Cloning site Green=Tags(s)

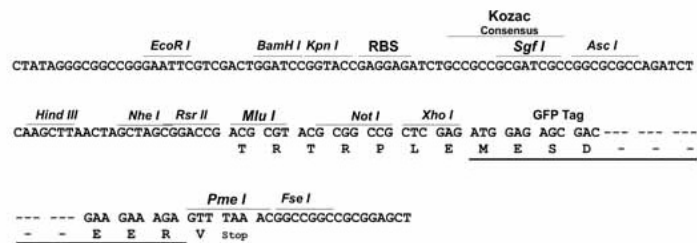
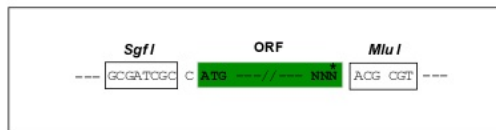
MSRSVLQPSQQKLAEKLTILNDRGVGMLTRLNYIKKACGDPKAKPSYLDKNLESVAVKFIVRKFFAVETR  
 NNNQQLAQLQKEKSEILKNLALYYFTFVDVMEFKDHVCDLLNTIDVCQVFFDITVNFDLTKNYLDLTVTY  
 TTLMILLSRIEERKAIIGLYNYAHEMTHGASDREYPRLGQMIVDYENPLKMMEEFVPHSKSLSDALISL  
 QMVYPRRNL SADQWRNAQLLSLISAPSTMLNPAQSDTMPCEYLSLDAMEKWIIFGFILCHGMLNTEATAL  
 NLWKLALQSSSLSLFRDEVFHIHKAEDL FVNIRGYNKRIINDIRECKEAAVSHAGSMHRERRKFLRSAL  
 KELATVLSQPGLLGPALFVFMALSFARDEI IWLLRHADNMPKKSADDFIDKHIAELIFYMEELRAHVR  
 KYGPMQRYVYVYLSGFDAVVLNQLSVCPEDESIIMSSFVNTMTSLSVKQVEDGEVDFRGMRLDW  
 FRLQAYTSVSKASLSLADHRELKGMNTIIFHTKMVDSLVEMLVETSLSIFCFYSRAFEKMFQCCLELP  
 SQSRYSIAFPLLCTHFMSCTHELCP EERHHIGDRSLSLCNMFLDEMAKQARNLITDICTEQCTLSDQLLP  
 KHCAKTI SQAVNKKSKKQTGKKGEPEREKPGVESMRKNRLVVTNLDKLHTALSELCSF SINYVPMNAVWEH  
 TFTPREYLTSHLEIRFTKSI VGM TMYNQATQEI AKPSELLTSVRAYMTVLQSIENYVQIDITRVFNVL  
 QQTQHLDSHGEPITISLYTNWYLETLLRQVSNGHIA YFPAMKAFVNLPTENELTFNAEEYSDI SEMRSL  
 ELLGPYGMKFLSESLMWHISSQVAELKKLVVENVDVLTQMRTSFDKPDQMAALFKRLSSVDSVLKRMTII  
 GVILSFRSLAQEALRDVLSYHIPFLVSSIEDFKDHIPRETDMKVAMNVYELSSAAGLPCEIDPALVVALS  
 SQKSENISPEEEYKIACLLMVFVAVSLPTLASNVMSQYSPAIEGHCNNIHCLAKAINQIAAALFTIHKGS  
 IEDRLKEFLALASSLLKIGQETDKTTTRNRESVYLLLDIMVQESPFLTMDLLESCFPYVLLRNAYHAVY  
 KQSVTSSA

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

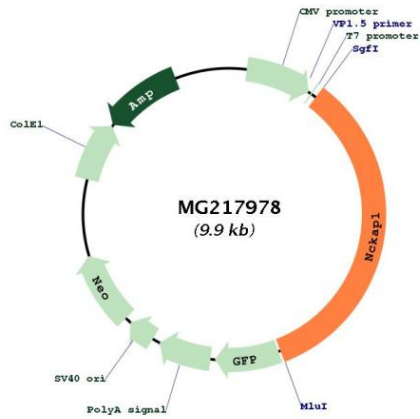


ACCN: NM\_016965

ORF Size: 3384 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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_016965.3</a> , <a href="#">NP_058661.1</a>
<b>RefSeq Size:</b>	3387 bp
<b>RefSeq ORF:</b>	3387 bp
<b>Locus ID:</b>	50884
<b>UniProt ID:</b>	<a href="#">P28660</a>
<b>Cytogenetics:</b>	2 48.21 cM
<b>Gene Summary:</b>	<p>Part of the WAVE complex that regulates lamellipodia formation. The WAVE complex regulates actin filament reorganization via its interaction with the Arp2/3 complex. Actin remodeling activity is regulated by RAC1. As component of the WAVE1 complex, required for BDNF-NTRK2 endocytic trafficking and signaling from early endosomes (PubMed:27605705). [UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MG217978