

## Product datasheet for MR217978

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nckap1 (NM\_016965) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nckap1  
**Synonyms:** C79304; H19; Hem-2; Hem2; mh19; mKIAA0587; Nap1; p125Nap1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR217978 representing NM\_016965  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGCTCCGTGCTGCAGCCAGTCAGCAGAAGCTGGCGGAGAAGCTCACCATCCTCAACGACCGGG  
GCGTCGGCATGCTCACGCGCCTACAACATCAAGAAGGCATGTGGCGACCCCAAGGCTAAACCTCCTA  
CCTTATTGACAAAAACCTGGAATCTGCTGTGAAATTCATAGTCAGAAAAATTCCTGCTGTAGAAACGCGC  
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ACAACATTAATGATACTGCTGTCCCGGATTGAAGAACGGAAGCAATCATTGGACTATACAATTATGCAC  
ATGAAATGACCCATGGAGCAAGTGACCGAGAATATCCACGCTTGGTCAGATGATTGTGGACTATGAAAA  
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GTGCACCCAGCACAATGCTTAATCCTGCGCAGTCGGACACTATGCCTTGTGAATATCTCTCTTGGATGC  
AATGGAGAAATGGATCATCTTTGGCTTTATTCTGTGCCATGGGATGCTAAATACGGAGGCTACCGCACTG  
AACCTTTTGAAGCTAGCTCTTCAGAGTAGCTCTTGCCCTCTCTCTTTTGGGATGAAGTTTTCCACATTC  
ACAAAGCTGCAGAAGACTTATTTGTAAACATTCGGGGCTACAATAAACGTTAATACGACATAAGAGAATG  
CAAGGAGCGGCTGTATCCCACGCGGCTCAATGCACAGAGAAAGACGCAAGTTTTTACGGTCTGCACTA  
AAAGAAGTGGCCACTGTCTCTGACCAGCCTGGCCTGCTTGGTCCCAAGGCACTTTTTGTTTTATGG  
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GACCTCCCTAAGTGTGAAGCAAGTTGAAGATGGAGAAGTGTGATTTTCAGAGGATGAGATTAGATTGG



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TTTAGGTTACAGGCGTACACTAGCGTCTCCAAAGCTTCACTTAGCCTTGAGATCACAGAGAACTTGAA  
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GAGCTCCTAGGCCATATGGGATGAAGTTCCTGAGTGAGAGCCTTATGTGGCACATTTATCACAAAGTAG  
CTGAACCTAAGAACTTGTGGTGGAGAATGTTGATGTTCTAACACAAATGAGGACCAGCTTTGACAAACC  
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CAGTTTCTTGCCTACACTGGCCAGCAATGTAATGTCACAGTACAGCCCTGCAATAGAAGGACACTGCAA  
CAATATACATTGTTGGCCAAAGCCATCAACCAGATTGCTGCAGCTTTGTTTACAATTACAAAGGAAGT  
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ATAAACTACAACAAGAAATAGAGAATCTGTTTATTTGCTACTGGATATGATTGTACAAGAATCACCATT  
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AAACAAAGTGTTACATCTTCTGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR217978 representing NM\_016965  
Red=Cloning site Green=Tags(s)

MSRSVLQPSQQKLAEKLTILNDRGVGMLTRLYNIKKACGDPKAKPSYLDKNLESVAVKFIVRKFFAVETR  
 NNNQQLAQLQKEKSEILKNLALYYTFFVDVMEFKDHCDDLNTIDVCQVFFDITVNFDLTKNYLDLTVTY  
 TTLMILLSRIEERKAIIGLYNYAHEMTHGASDREYPRLGQMIVDYENPLKMMEEFVPHSKSLSDALISL  
 QMVYPRRNLADQWRNAQLLSLISAPSTMLNPAQSDTMPCEYLSLDAMEKWIIFGFILCHGMLNTEATAL  
 NLWKLALQSSSCLSLFRDEVFHIHKAEDLFVNIIRGYNKRINDIRECKEAAVSHAGSMHRRRKRFLRSAL  
 KELATVLSQDPGLLGPKALFVFMALSFARDEIWLRLHADNMPKKSADDFIDKHIAELIFYMEELRAHVR  
 KYGPMQRYVYVQYLSGFDVAVLNELVQNLVSCPEDESIIMSSFVNTMTLSVKQVEDGEVDFRGMRLDW  
 FRLQAYTSVSKASLSLADHRELGKMMNTIIFHTKMVDSLVEMLVETSDLSIFCFYSRAFEKMFQQCLELP  
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 QQTQHLDSHGPTITSLYTNWYLETLLRQVSNGHIA YFPAMKAFVNLPTENELTFNAEEYSDI SEMRSL  
 ELLGPGYGMKFLSESLMWHISSQVAELKKLVVENVDLTQMRTSFDKPDQMAALFKRLSSVDSVLKRMII  
 GVILSFRSLAQEALRDVLSYHIPFLVSSIEDFKDHIPRETMKVAMNVYELSSAAGLPCEIDPALVVALS  
 SQKSENISPEEEYKIACLLMVFVAVSLPTLASNVMSQYSPAIEGHCCNNIHCLAKAINQIAAALFTIHKGS  
 IEDRLKEFLALASSLLKIGQETDKTTTRNRESVYLLLDMIVQESPFLTMDLLESCFPYVLLRNAYHAVY  
 KQSVTSSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9095\\_d05.zip](https://cdn.origene.com/chromatograms/mm9095_d05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016965

**ORF Size:** 3384 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_016965.3](#), [NP\\_058661.1](#)

**RefSeq Size:** 4403 bp

**RefSeq ORF:** 3387 bp

**Locus ID:** 50884

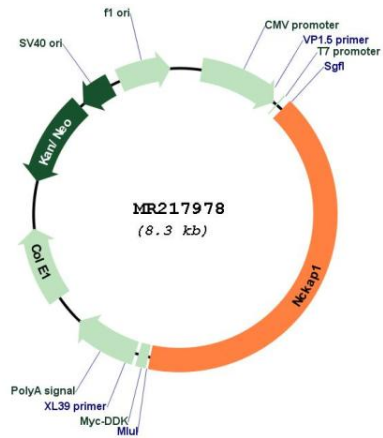
**UniProt ID:** [P28660](#)

**Cytogenetics:** 2 48.21 cM

**MW:** 128.8 kDa

**Gene Summary:** 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]

Product images:



Circular map for MR217978