

Product datasheet for **MR218520**

Kif21a (NM_001109041) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kif21a (NM_001109041) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kif21a
Synonyms:	A1850764; mKIAA1708
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR218520 representing NM_001109041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGGGCGCTGCGGACGAGAGCTCGGTGCGCGTGGCTGTCAGAATAAGACCACAGCTTGCCAAAGAGA
AGATCGAAGTTGCCATATCTGCACGTCAGTCACACCGGGAGAGCCTCAGGTCTTCTCGGAAGGATAA
GGCCTTTACTTTTGATTATGTGTTGACATTGACTCCCAGCAGGAGCAGATCTACACCCAGTGCATCGAA
AAGCTCATTGAAGGCTGTTTTGAAGGCTACAATGCCACCGTGTTCCTATGGACAAACCGAGCTGGGA
AAACCTACACGATGGGAACCGGATTTGACGTGAACATCATGGAGGAAGAGCAGGGCATCATCTCTCGTGC
TGTTAGACACCTGTTCAAGAGTATTGATGAGAAAAAGACCTCAGCGATTAACCGGGCTGCCCCCTCT
GAATCAAAGTGAATGCCAGTTCCTAGAGCTCTATAATGAAGAGGTCCTTGACTTGTTTGATACCACTC
GGGATATTGATGCAAAAAATAAAAAATCAAAATAAAGAATTCATGAAGATTCAACTGGAGGAATTTATAC
TGTGGGCGTCACAACACGCACTGTGAATACAGAACCGGAGATGATGCAGTGTCTGAAGCTGGGCGCTCTC
TCGCGCACCCAGCCAGCACCCAGATGAACGTACAGAGCTCTCGTTCACACGCCATCTTTACCATCAGC
TGTGTCAAACAGAGTGTGTCCCAACAGATGCTGAGAACCGCAACTGATAATAAGCTGATCTCCGAATC
GTCGCCAATGAATGAGTTTGAGACGCTGACGGCGAAGTTTCACTTTGTTGATCTGGCGGGATCGGAAAGA
CTGAAGAGAACCGGAGCTACAGGCGAGAGAGCAAAAGAGGGCATTTCATCAACTGCGGGCTTTTGCTC
TTGGGAATGTAATCAGCGCCTTGGGGGACAAGAGCAAGAGAGCCACCCATGTCCCTTACAGAGACTCTAA
GCTGACAAGACTCTGCAGGATTCCTTGGGGTAACAGCCAAACCATCATGATAGCATGCGTCAGCCCT
TCAGACAGGGATTTTCATGGAGACGTTAAACACTCTGAAGTACGCCAATCGAGCGAGAAATATCAAGAACA
AGGTGATGGTCAATCAAGACAGAGCCAGTCAGCAAATCAACGCGCTGCGGAGCGAGATCACGCGCCTTCA
GATGGAGCTCATGAATACAAAACCGTAAAAGAATAATTGACGAGGAAGGCGTGGAAAGCATCAATGAC
ATGTTTCATGAGAATGCTATGCTGCAGACGGAAAATAAATCTGCGTGAAGAATAAAGCCATGCAGG
AGACCGTTGATGCACTGAGGGCCAGAATCACGAGCTTGTGAGTGCAGGCAACCAAGTTCTTGCCCCG
AGCAGGTGAAGGGAACGAAGAGATCAGTAATATGATTCATAGTTATATCAAGAAATGAAGACCTCAGG
GCAAAATTATTAGAAAGTGAAGCAGTGAACGAGAACCTTCGGAAGAACTTGACCAGAGCCACGGCGAGAT



[View online >](#)

CTCCTTACTTCAGTGCCTCCTCAGCTTTCTCGCCTACTATACTGTCTTCAGACAAGGAGACTATCGAAAT
 TATAGATCTAGCAAAGAAAGACTTGGAGAAGCTAAAACGGAAAGAGAAGAAGAAGAAAGTGTGGCC
 GGGAAAGACGATAATGCAGACACTGACCAGGAGAAGAAAGAAAGAAAGGGTGTTCAGAGAAAGAAAACA
 ATGAGCTAGACGTGGAAGAGAATCAAGAAGTGAGTGACCACGAGGATGAGGAAGAGGAGGAAGAGGACGA
 GGAGGAAGAGGATGACATTGAAGGAGAAGAAAGCTCTGATGAATCAGATCCGAATCTGATGAAAAAGCT
 AACTATCAAGCCGACTTAGCAAAATCACCTGCCGAGATTGCGATTAAGCAGAAGCTGATCGACGAACTGG
 AGAACAGCCAGAAACGGCTGCAGACCTGAAAAAGCAGTACGAGGAGAAGCTGATGCTCCAACATAA
 GATCCCGGACACGCAGCTGGAGAGGGACCAGGTCTCCAGAACCTAGGCTCGGTGGAGTCATACTCGGAA
 GAAAAGGCCAAGAAAGTGAAGTGCGAATATGAGAAGAAGCTCCACGCCATGAACAAAGAGCTGCAGCGAC
 TGCAGACGGCCAAAAGGAGCACGCCAGGCTCCTCAAAAACAGTCTCAGTATGAAAAGCAGCTCAAGAA
 ACTGCAGCAAGACGTCATGGAATGAAGAAAACCAAGTTCGTCTAATGAAGCAGATGAAAGAAGAGCAG
 GAGAAAGCCCGGCTGACAGAATCTGAAGGAACCGGAAATCGCTCAGCTGAAGAAGGATCAGCGCAAGC
 GAGATCATCAACTTAGACTTCTAGAGGCCAGAAAAGAAATCAAGAAGTAGTTCTGCGACGCAAAACGGA
 AGAGGTTACAGCTCTCCGACGGCAAGTGAGGCCATGTCTGATAAAGTAGCGGGAAAAGTACTCGGAAG
 CTGAGCTCATCCGAAAGCCCGCTCCGGACACAGGTTCCAGTGGCGCTTCCGGGGAAGCAGACACATCAC
 GGCACAGCACCCAGCAGAAAATGAGGATCCCCGTGGCAAGAGTCCAGGCATTACCAACACCTACAACAAA
 TGGCACCAGGAAAAAATATCAGAGGAAAGGATTACTGGCCGGGTGTTCACTTCCAAGACAGCCCGCATG
 AAGTGGCAGCTACTGGAGCGCCGGTGACCGACATCATCATGCAGAAAATGACCATCTCCAACATGGAGG
 CGGACATGAACAGACTCCTCAGGCAACGGGAAGAACTCACAAAAGGCGAGAGAACTTTCTAAAAGGAG
 AGAGAAGATAGTCAAGGAGAGCGGAGAGGGAGATAAAAGTGTGGCTAACATCATCGAGGAGATGGAGTCC
 CTGACAGCCAACATAGATTACATCAATGATAGCATTGCCGACTGTCAAGCCAACATCATGCAGATGGAGG
 AGGCAAAAGGAAGAAGGGGAGACATTGGATGTCACCGCTGTCAATTAATGCCTGTACTACTGACAGAAGCTCG
 GTCACTGTAGTCACTTCTGTCAATGGGCATCAATAAGGGTCTGCAGGCTGCCAGAAAAGAGGCTCAA
 ATTAAGTCTCGAGGGTGCAGTCAAAACAGACCGAAATCACCAGTGAACCCAGAACTTCTTATTCC
 ATATGCTGAAGGAGAAGGCAGAGCTAAACCCAGAGCTGGATGCCTTGTAGGCCACGCACTGCAAGATCT
 AGATGGCGCCACCAGAAAACGAGGAGGACAGCAGCGAGGAAGATGGCCCTTTACACAGCCCGGGTCTG
 GAGGGAAGCACGTTATCTTCAGACCTTATGAAGCTTTGTGGTGAAGTGAACCAAGAACAAGGCTCGAA
 GGAGAACCACCACTCAGATGGAGTTGCTGTATGCAGATAGCAGTGAAGTAGCCTCAGACACTAGTGCAGG
 AGATGCCTCCTTGTCTGGCCCTCTGGCACCTGTTGCAGAAAGGCGAGGAGATTGGAATGAACACAGAGACA
 AGTGGTACTTCTGCTAGGACAAAAGAGCTTCTTCCCCATCTGGCTTACCTTCTAAGATAGGCAGCATCT
 CAGATTCGGGCGCTTCCGAGACTAGTCTCTCACCTCCTTCTCCCCACCAAGCCGGCCCCGTAACGAACT
 GAATGTGTTAATCGCCTTACTGTGCCTCAGGGAACCCCGTCAGTTCAGCAGGATAAGTCTGATGAAAGT
 GACTCCTCTTGTCCGAGGTGCACAGCAGATCCACCAGAAGAGGCATAATCAACCCATTTCTGCCTGCA
 AAGGAGTCAGAGCCTCTCCTCTTCAGTGCCTTACATAGCTGAAGGGCACACCAAGGCTGTGCTCTGTGT
 GGATTCTACGGATGATCTTCTTACCAGGATCAAAAAGTTCGCACTTGTAAAGTATGGAATCTCGTGACT
 GGACAGGAAATATGTCCTGGGGTTCACCCTAACACGTGGTGTCTGTAAAATACTGTAAATATACCA
 GTCTGGTCTTACCAGTGCAGACTTATTAAGGTGTGGGATATCAGAGAGTCAGCAAAATGCATTCC
 AACATTAACATCTTCAGGTCAAGTTACCCTTGGAGAAGCGTGTCTGCCAGCACCAGCCGGACAGTAGCT
 ATTCCTTCCGGGAGAGCCAGATCAATCAAATGCACTAAACCAACTGGCACTTCTCTACGCGCCCT
 CTGGAAAATGCCGTGAGAATGTGGGACCTTAAAAGGTTTCACTACAGGAAAGTAAACCGACACCTGGG
 TCCTGTTATGTGCCTTACGGTAGACCAGATCTCCAATGGACAGGACCTCATCATCACTGGCTCAAAAAGAC
 CACTACATCAAAAATGTTGATGTGACTGAAGGGGCTCTTGGAACTGTAAGTCCCACCCACAACCTCGAGC
 CTCCTCATTATGATGGGATAGAAGCACTGGCCATTCAAGGCGATAACCTATTCAGTGGGTCCAGAGATAA
 TGGAAATCAAGAAATGGGACTTAGCTCAGAAAGGCTTCTTTCAGCAAGTCCCAAATGCACACAAAGACTGG
 GTGTGTGCCCTGGGCTGGTCCAGGCCATCCGGTTTTGCTGAGTGGCTGCAGAGGCGGCATTCTGAAAC
 TCTGGAATGTGGACACTTTTGTGCCGTTGGAGAGATGAGAGTTCATGACAGTCCCATCAATGCCATTTG
 TGTTAACTCCACCATGTCTTACTGCTGCTGATGATCGAACCGTGAAGTCTGGAAGGCCCAACTTG
 CAAGATGGTCAACTCTCTGACACCGCGATCTGGGGGAGGATATTGCCAGTAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218520 representing NM_001109041
 Red=Cloning site Green=Tags(s)

MLGAADESSVRVAVRIRPQLAKEKIEGCHICTSVTPGEPQVFLGKDKAFTDYVFDIDSQQEQIYTQCIE
 KLIEGCFEGYNATVFAYGQTGAGKTYTMGTGFDVNIEMEEQGIISRAVRHLFKSIDEKKTSAIKNGLPPP
 EFKVNAQFLELYNEEVLDFDTRRIDAKNKKSNIRIHEDSTGGIYTVGVTRTRVNTPEMMQCKLKGAL
 SRTTASTQMNVSRSRSHAIFTIHVCQTRVCPQTDANATDNKLI SESSPMNEFETL TAKFHFVDLAGSER
 LKRTGATGERAKEGISINCGLLALGNVISALGDKSKRATHVVPYRDSKLTRLLQDSLGGNSQTIMIACVSP
 SDRDFMETLNTLKYANRARNIKNKVMVNDQRASQQINALRSEITRLQMELMYKTKRIIDEEGVESIND
 MFHENAMLQTENNLRVRIKAMQETVDALRARITQLVSEQANQVLARAGEGNEEISNMIHSYIKEIEDLR
 AKLLESEAVNENLRKNL TRATARSPYFSASSAFSPTILSSDKETIEIIDLAKKDLEKLRKEKKKKSV
 GKDDNADTDQEKKEEGVSEKENNELDVEENQEVSDHEDEEEEEDEEEDDIEGEESSDESDESDEKA
 NYQADLANITCEIAIKQKLIDELNSQRLQTLKKQYEEKLMLLQHKIRDQTLERDQVLQNLGSVESYSE
 EKAKKVKCEYEKKLHAMNKELQRLQTAQKEHARLLKNQSQYEKQLKKLQQDVMEMKTKVRLMKQMKEEQ
 EKARL TESRRNREIAQLKKDQRKRDHQLRLLAQKRNQEVVLRKRTTEEVTALRRQVRPMSDKVAGVTRK
 LSSSESPADTGSSAASGEADTSRPGTQQKMRIPVARVQALPTPTTNGTRKKYQKRGFTGRVFTSKTARM
 KWQLLERRVTDIIMQKMTISNMEADMNRLLRQREELTKRREKLSKRREKIVKESGEGDKSVANIIEMES
 LTANIDYINDSIADCQANIMQMEEAKEEGETLDVTAVINACTL TEARYLLDHFLSMGINKGLQAAQKEAQ
 IKVLEGRLLKQTEITSATQNQLLFHMLKEKAELNPELDALLGHALQDLGDGAPPENEEDSSEEDGPLHSPGS
 EGSTLSSDLMLKCGEVKPKNKARRRTTQMELL YADSSEVASDTSAGDASL SGPLAPVAEGQEIGMNTET
 SGTSARDKELLAPSGLPKIGSISDSGASETSL SPPSSPPSRPRNELNVFNRL TVPQGTSPVQQDKSDES
 DSSLSEVHSRSTRRGIINFPACKGVRASPLQCVHIAEGHTKAVLCVDSTDDLFTGSKDRTCCKVWNLVT
 GQEIMSLGVHPNNVSVKYCNYTSLVFTVSTSYIKVWDIRESAKCIRTL TSSGQVTLGEACSASTRVA
 IPSGESQINQIALNPTGTFLYAASGNAVRMWDLKRFQSTGKLTGHLGPMCLTVDQISNGQDLIITGSKD
 HYIKMFDVTEGALGTVSPHNFEPHYDGI EALAIQGDNLFSGSRDNGIKKWDLAQKGLLQVVPNAHKDW
 VCALGLVPGHPVLLSGCRGGILKLVNVDTFVPVGMERGHDSPINAICVNSTHVFTAADDRTVRIWKAHNL
 QDQQLSDTGDLGEDIASN

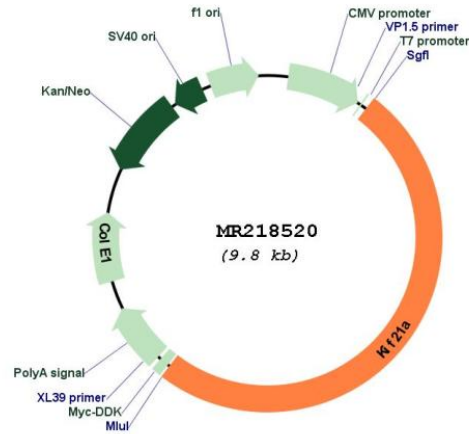
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001109041

ORF Size: 4884 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_001109041.2](#), [NP_001102511.1](#)

RefSeq Size: 6307 bp

RefSeq ORF: 4887 bp

Locus ID: 16564
UniProt ID: [Q9QXL2](#)
Cytogenetics: 15 45.86 cM
MW: 181.8 kDa
Gene Summary: Microtubule-binding motor protein probably involved in neuronal axonal transport. In vitro, has a plus-end directed motor activity.[UniProtKB/Swiss-Prot Function]