

Product datasheet for **RC221574**

KIF18B (NM_001080443) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIF18B (NM_001080443) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIF18B
Synonyms:	kinesin family member 18B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221574 representing NM_001080443
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGTGGAGGACAGCACGCTGCAAGTAGTGGTACGGGTGCGGCCCCACCCTCGGGAGCTGGACA
 GTCAGCGCGGCCAGTGGTTAGGTGGTGGACGAGCGGGTCTGGTGTAAACCTGAGGAGCCGATGG
 AGGGTTCCCTGGCCTGAAATGGGGTGGCACCCATGATGGCCCAAGAAGAAGGGCAAAGACCTGACGTTT
 GTCTTTGACCGGGTCTTTGGCGAGGCGGCCACCCAACAGGACGTGTTCCAGCACACCACGCACAGCGTCC
 TGGACAGCTTCTCCAGGGCTACAAGTCTCAGTGTGGCTACGGGGCCACGGGGCTGGGAAGACACA
 CACCATGCTGGGAAGGGAGGGGACCCCGCATCATGTACCTGACCACCTGGAAGTGTACAGGCGCCTG
 GAGGCCCGCCAGCAGGAGAAGCACTTCGAGGTGCTCATCAGCTACCAGGAGGTGTATAATGAACAGATCC
 ATGACCTCTGGAGCCAAAGGGGCCCTTGCCATCCGCGAGGACCCGACAAGGGGGTGGTGGTGAAGG
 ACTTTCTTTCCACCAGCCAGCCTCAGCCGAGCAGCTGCTGGAGATACTGACCAGGGGAACCGTAACCGC
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 AGCAGGACCGGGTTCAGGACTGACCCAGGCTGTCCAGGTGGCCAAGATGAGCCTGATTGACCTGGCTGG
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 CTGCTGGCGCTCATCAACGTCCTCAATGCCTTGGCCGATGCAAAGGGCCGCAAGACCCATGTGCCCTACC
 GGGACAGCAAAGTACCCGCTGCTCAAAGACTCCCTCGGGGGCAACTGCCGCACAGTGTATGCTGCTGC
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 ATCAGGCTCTCGCTGAAGAGCAATGTGACCAGCCTGGACTGTACATCAGCCAGTATGCTACCATCTGCC
 AACAGCTCCAGGCTGAGGTAGCCGCTCTGAGGAAGAAGCTCCAAGTGTATGAGGGGGGAGGCCAGCCCC
 ACCACAGGACCTCCAGGATCTCCCAAGTCGGGACCAACCACAGAACACCTTCCAGCTCCCCCTTGCCA
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 GAGTCCCTCGCCTGACCCTGCAGCCAAAGCCAGTCGTGGGCCACTTCTCAGCACGGGAAGTGGATGGGG
 ACCGTTCTAAGCAGTTGGCCCTAAAGGTGCTGTGCGTTGCCAGCGGCAGTACTCCCTGCTCCAAGCAGC
 CAACCTCTGACCCCGACATGATCACAGAGTTTGAGACCCTACAGCAGCTGGTGAAGAGGAAAAAATT
 GAGCCTGGGGCAGAGCCCTTGGAGACTCAGCCCTGGCCAGGGGGCACCTCTGGCTCAGGAGCTGTGTT
 CAGAGTCAAAGCCTCCAGGATACACTGGCCCTGTGACCCGGACTATGGCGAGGCGACTGAGTGGCCCTC
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 AAGAGGAGGAGACCAAGCGCCTTGGAGGACAGCAGTCCCATGGCCCAAAGCGGGGACCAAGCGCCAGC
 GCCAGTCTTCTGCCCTGCCTAAGGAGAGGGTCTCTGCCTGACACCCAACTTACAGGGGGCCAGCAC
 CCCCAAAGGAGAAAGGGCCTCCTCCCCTGCCATTCCCCCTCGCGTTTGCCAGCCACAGTCAAAAAGC
 CGGGTGCCCTGGGCCCTCCGCCATGCAGAACTGCTCCACCCCGCTGGCTCTGCCACTCGAGACCTCA
 ATGCCACCTTTGATCTCTCTGAGGAGCCTCCCTCAAAGCCAGTTCCATGAATGCATTGGCTGGGACAA
 AATACCCAGGAGCTGAGCAGGCTGGACCAGCCCTTATCCCCAGGGCACCTGTGCCCTGTTCCACCATG
 AAGGGCCCAAGCAACATCTTCCCTCCCTGGGACCTCTGCCTGCAAGAAGAAGCGGTTGCGAGTTCTCT
 CAGTCTCCATGGCCGACGCGCATCGCCGCTCCCCAGCAGCACTTTGAAGAGGCCAGCTGGGCCCT
 TGTACTCCAGAGCTGCCCTTGTGCTGCTGACCAACCGGAGGAATGGAAGGACCTCATCAGG
 GTGGGGAGAGCACTCTCAGCAGGGAACGGGCTCACAAGGTGTCC

ACCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221574 representing NM_001080443
 Red=Cloning site Green=Tags(s)

MAVEDSTLQVVVRVVRPPTPRELDSQRRPVVQVVDERVLVFNPEEPDGGFPGLKWGGTHDGPKKKGKDLTF
 VFDRVFGAATQQDVFQHTTHSVLDSFLQGYNCVVFAYGATGAGKTHTMLGREGDPGIMYLTVELYRRL
 EARQQEKHFEVLI SYQEYVNEQIHDLLLEPKGPLAIREDPDKGVVQGLSFHQPASAEQLLEILTRGNRNR
 TQHPTDANATSSRSHAI FQIFVKQQDRVPGLTQAVQVAKMSLIDLASERASSTHAKGERLREGANINRS
 LLALINVNLNALADAKGRKTHVPYRDSKLRLLKDSLGGNCRTVMIAAISPSSTLYEDTYNTLKYADRAKE
 IRLSLKSNVTSLDCHISQYATICQQLQAEVAALRKKLQVYEGGGQPPPQDLPGSPKSGPPPEHLPSPLP
 PHPPSQPCTPELPAGPRALQEESLGMEAQVERAMEGNSSDQEQSPEDEDEGPAEEVPTQMPEQNPTHALP
 ESPRLTLQPKPVVGHFSARELDGDRSKQLALKVLCVAQRQYSLQAANLLTPDMI TEFETLQQLVQEEKI
 EPGAEALRTSGLARGAPLAQELCSESKPPGYTGPVTRTMARRLSGPLHTLGI PPGPNCTPAQGSRWPMK
 KRRRPSALEADSPMAPKRGTRKRQSF L PCLRRGSLPDTQPSQGPSTPKGERASSPCHSPRVCPATVIKS
 RVPLGPSAMQNCSTPLALPTRDLNATFDLSEPPSKPSFHECIGWDKIPQELSRLDQPFIPRAPVPLFTM
 KGPKPTSSLPGTSACKKKRVASSSVSHGRSRIARLPSSTLKRPA GPLVLPPELPLSPLCPSNRRNGKDLIR
 VGRALSAGNGVTKVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8041_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

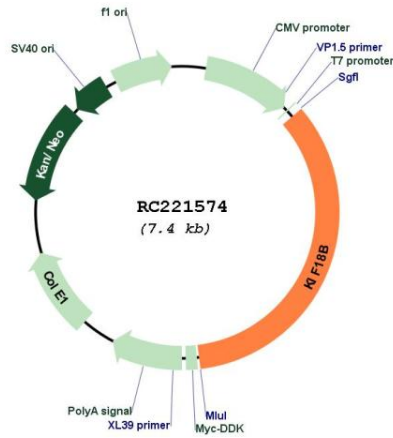
Cloning sites used for ORF Shuttling:



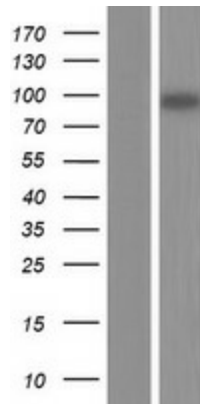
* The last codon before the Stop codon of the ORF

ACCN:	NM_001080443
ORF Size:	2565 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_001080443.1 , NP_001073912.1
RefSeq Size:	2669 bp
RefSeq ORF:	2567 bp
Locus ID:	146909
Cytogenetics:	17q21.31
Protein Families:	Druggable Genome
MW:	93.1 kDa
Gene Summary:	In complex with KIF2C, constitutes the major microtubule plus-end depolymerizing activity in mitotic cells. Its major role may be to transport KIF2C and/or MAPRE1 along microtubules. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221574



Western blot validation of overexpression lysate (Cat# [LY421660]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221574 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).