

## Product datasheet for **SC304391**

### KIF20B (NM\_016195) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KIF20B (NM_016195) Human Untagged Clone
Tag:	Tag Free
Symbol:	KIF20B
Synonyms:	CT90; KRMP1; MPHOSPH1; MPP-1; MPP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304391 representing NM_016195. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAATCTAATTTTAAATCAAGAGGGAGTACCTCGACCATCTTATGTTTTTAGTGCTGACCCAATTGCA
AGGCCTTCAGAAATAAATTTTCGATGGCATTAAAGCTTGATCTGTCTCATGAATTTTCCTTAGTTGCTCCA
AACTACTGAGGCAACAGTTTCGAATCTAAAGATTATCTCCAGGTTTGTCTTCGAATAAGACCATTTACA
CAGTCAGAAAAAGAACTTGAGTCTGAGGGCTGTGTGCATATTCTGGATTCACAGACTGTTGTGCTGAAA
GAGCCTCAATGCATCCTTGGTCGGTTAAGTAAAAAAGCTCAGGGCAGATGGCACAGAAATTCAGTTTT
TCCAAGGTTTTTGGCCAGCACTACACAGAAGGAATTTTTCAGGTTGCATTATGCAACCAGTAAAA
GACCTCTTGAAAGGACAGAGTCGTCTGATTTTTACTTACGGGCTAACCAATTCAGGAAAAACATATACA
TTTCAAGGGACAGAAAGAAATATTGGCATTCTGCCTCGAACTTTGAATGTATTATTTGATAGTCTCAA
GAAAGACTGTATACAAAGATGAACCTTAAACCACATAGATCCAGAGAATACTTAAGGTTATCATCAGAA
CAAGAGAAAGAAGAAATTTGCTAGCAAAAGTGCAATTGCTTCGGCAAATTAAGAGGTTACTGTGCATAAT
GATAGTGATGATACTCTTTATGGAAGTTAACTAACTCTTTGAATATCTCAGAGTTTGAAGAATCCATA
AAAGATTATGAACAAGCCAATTTGAATATGGCTAATAGTATAAAATTTTCTGTGTGGGTTCTTTCTTT
GAAATTTACAATGAATATATTTATGACTTATTTGTTCTGTATCATCTAAATTCAAAAGAGAAAGATG
CTGCGCCTTTCCAAGACGTAAGGGCTATTCTTTTATAAAGATCTACAATGGATTCAAGTATCTGAT
TCCAAAGAAGCCTATAGACTTTTAAACTAGGAATAAAGCACCAGAGTGTGCCTTCACAAAATGAAT
AATGCTTCCAGTAGAAGTCACAGCATATTTCACTGTTAAAAATTTACAGATTGAAGATTCTGAAATGTCT
CGTGTAATTCGAGTCAGTGAATTATCTTTATGTGATCTTGTGTTTCCAGAACGAATATGAAGACACAG
AATGAAGGTGAAAGGTTAAGAGAGACTGGGAATATCAACACTTCTTTATTGACTCTGGGAAAGTGATT
AACGCTTGAAGAATAGTAAAAGTCAAAGTTTCAACAGCATGTGCCTTTCCGGGAAAGTAACTGACT
CACTATTTTCAAAGTTTTTTAATGGTAAAGGGAAAAATTTGTATGATTGTCAATATCAGCCAATGTTAT
TTAGCCTATGATGAAACACTCAATGTATTGAAGTTCTCCGCCATTGCACAAAAAGTTTGTGTCCCAGAC
ACTTTAAATTCCTCTCAAGAGAAATTTTGGACCTGTCAAATCTTCTCAAGATGTATCACTAGACAGT
```



[View online >](#)

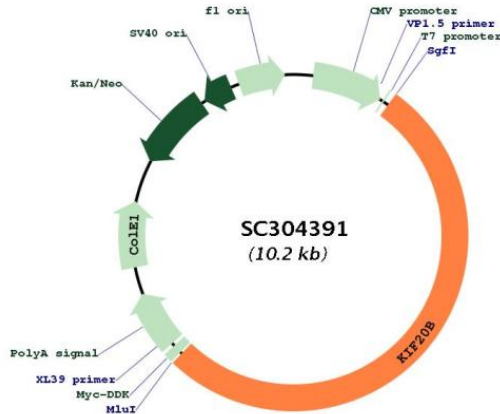
AATTCAAACAGTAAAATATTAATGTA AAAAGAGCCACCATTTTCATGGGAAAATAGTCTAGAAGATTTG  
 ATGGAAGACGAGGATTTGGTTGAGGAGCTAGAAAACGCTGAAGAAACTCAAATGTGAAACTAACTT  
 CTTGATGAAGATCTAGATAAACATTAGAGGAAAAAAGGCTTTTCATTAGCCACGAGGAGAAAAAGAAA  
 CTGTTGGACTTAATAGAAGACTTGA AAAAAAACTGATAAATGAAAAAAGGAAAAATTAACCTTGGAA  
 TTTAAAATTCGAGAAGAAGTTACACAGGAGTTACTCAGTATTGGGCTCAACGGGAAGCTGACTTTAAG  
 GAGACTGCTTCAAGAACGAGAGATATTAGAAGAAAATGCTGAACGTCGTTTGGCTATCTTCAAGGAT  
 TTGGTTGGTAAATGTGACACTCGAGAAGAACGAGCGAAAGACATTTGTGCCACAAAAGTTGAAACTGAA  
 GAAGCTACTGCTTGTAGAACTAAAAGTTAATCAAATTAAGCTGAATTAGCTAAAACCAAAGGAGAA  
 TTAATCAAACCAAAGAAGGTTAAAAAGAGAGAAAAATGAATCAGATTCATTGATTCAAGAGCTTGAG  
 ACATCTAATAAGAAAATAATTACACAGAATCAAAGAATTAAGAATTGATAAATAAATTGATCAAAAA  
 GAAGATACTATCAACGAATTCAGAACCTAAAGTCTCATATGGAAAACACATTTAAATGCAATGACAAG  
 GCTGATACATCTCTTAATAATAACAATAAATTGATTTGTAATGAAACAGTTGAAGTACCTAAGGAC  
 AGCAAATCTAAAATCTGTTCAAGAAAGAAAAGAGTAAATGAAAATGAACTTCAGCAAGATGAACCACCA  
 GCAAAGAAAGGGTCTATCCATGTTAGTTCAGCTATCACTGAAGACCAAAGAAAAGTGAAGAAGTCCGA  
 CCGAACATTGCAGAAATGAAGACATCAGAGTTTACAAGAAAATAATGAAGACTGAGAGCATTTTTTA  
 CCACTATTGAGAATGAACTTAAAAATGAAAAGGAAGAAAAGCAGAATTAATAAACAGATTGTTTCAT  
 TTTCCAGCAGAACTTTCTCTTCTGAAAAAAGAAATTAACCTTAAAGTAAAGAGGTTCCAACAAATTCAG  
 TCAAAATATGATATTGCAATTGCTGAATACATGTGCAGAAAAGTAAAAATCAAGAACAGGAGGAAAAAG  
 ATCATGAAATGTCAAATGAGATAGAACTGCTACAAGAAGCATTACAAATAATGTTTCCAAAAATAAAA  
 TTAATGCACACGAAAAAGACGAACTACGACTCTTGTTCAGTTTCTCAGATTTCAAACATAGATTTG  
 CTAATCTCAGGGATCTGTCAAATGGTTCTGAGGAGGATAATTTGCCAAATACACAGTTAGACCTTTTA  
 GGTAATGATTATTTGGTAAGTAAGCAAGTTAAAGAATATCGAATCAAGAACCAATAGGGAAAAATCT  
 TTCCACTCTAGTATTGAAGCTATTTGGGAAGAATGTAAGAGATTGTGAAGGCCTTTCCAAAAAAGT  
 CATCAGATTGAGGAAGTGAACAACAAATTTGAAAAATTGCAGGCAGAAGTAAAAGCTATTAAGGATGAA  
 AACAAATAGACTAAAGGAGAAGGAGCATAAAAACCAAGTACCTACTAAAAGAAAAAGAACTCTTATA  
 CAGCAGCTGAAAGAAGAATTGCAAGAAAAAATGTTACTCTTGATGTTCAAATACAGCATGTAGTTGAA  
 GGAAAGAGAGCGCTTTCAGAAGTACACAAGGTGTTACTTGCTATAAGGCCAAAAATAAGGAACTTGAA  
 ACAATTTTAGAGACTCAGAAAGTTGAATGTAGTCATTAGCAAGTTAGAACAAGACATTTTGGAAAAAG  
 GAATCTATCATCTTAAAGCTAGAAAGAAATTTGAAGGAATTTCAAGAACATCTTCAGGATTTCTGTCAA  
 AACACCAAAGATTTAAATGTAAGGAAGTCAAGCTGAAAGAAGAAATCACACAGTTAACAATAATTTG  
 CAAGATATGAAACATTTACTTCAATTAAGAAGAAAGAAAGAAACCAAGGCAAGAAACAGAAAAA  
 TTGAAAGAGGAAGTCTCTGCAAGCTCTGCTCGTACCCAGAATCTGAAAGCAGATCTTCAGAGGAAGGAA  
 GAAGATTATGCTGACCTGAAAGAGAAACTGACTGATGCCAAAAAGCAGATTAAGCAAGTACAGAAAGAG  
 GTATCTGTAATGCGTGATGAGGATAAAATTAAGGATTAAAAATTAAGTAACTGGAGAAAAAGAAAAAC  
 CAGTGTCTCAGGAATTAGATAGAAACAGCGAACCTTCAGCAACTCAAGGAGCAGTTAAATAATCAG  
 AAAGTGGAAAGACTATACAACAGTATGAGAGAGCATGCAAGATCTAAATGTTAAAGAGAAAAATAAT  
 GAAGACATGCGAATGACACTAGAAGAACAGGAACAACTCAGGTAGAACAGGATCAAGTCTTGGAGCT  
 AAATTAGAGGAAGTTGAAAGGCTGGCCACAGAATTGAAAAATGGAAGGAAAAATGCAATGATTTGGAA  
 ACCAAAAACAATCAAAGGTCAAATAAAGAACATGAGAACAACACAGATGTGCTTGGAAAGTCACTAAT  
 CTTCAAGATGAGTTACAGGAGTCTGAACAGAAATATAATGCTGATAGAAAGAAATGGTTAGAAGAAAA  
 ATGATGCTTATCACTCAAGCGAAAGAAGCAGAGAAATACGAAATAAAGAGATGAAAAAATGCTGAG  
 GACAGGGAGCGTTTTTTAAGCAACAGAATGAAATGGAATACTGACAGCCAGCTGACAGAGAAAGAT  
 AGTGACCTTCAAAGTGGCGAGAAGAACGAGATCAACTGGTTGCAGCTTTAGAAATACAGCTAAAAGCA  
 CTGATATCCAGTAATGTACAGAAAGATAATGAAATGAACAACAAAAAGGATCATATCAGAGACTTCT  
 AAAATAGAAACACAAATCATGGATATCAAGCCAAACGATTAGTTTCCAGCAGATCCTGACAACTCAA  
 ACTGAACCTCTATCGACAAGTTTTGAAATTTCCAGAAATAAATAGAGGATGGATCTGTAGTCTTGAC  
 TCTTGTGAAGTGTCAACAGAAAAATGATCAAAGCACTCGATTTCCAAAACCTGAGTTAGAGATTCAATTT  
 ACACCTTTACAGCCAAACAAAATGGCAGTGAAACACCCTGGTTGTACCACACCAGTGACAGTTAAGATT  
 CCCAAGGCTCGGAAGAGGAAGAGTAATGAAATGGAGGAGGACTTGGTGAATGTGAAAAATAAGAAGAT  
 GCTACACCAGAACTAATTTGAAATTTCTATTTTCCAGATGATAGAAATCTTCTGTCAAAAAGGAACAA  
 AAGGTTGCCATACGTCCATCATCTAAGAAAAACATATTCTTTACGGAGTCAGGCATCCATAATTTGGTGT  
 AACCTGGCCACTAAGAAAAAGAAGGAACACTACAGAAATTTGGAGACTTCTTACAACATTTCCCTCA

```

ATTCTTCAATCAAAGCAAAGAAGATAATTGAAACAATGAGCTCTTCAAAGCTCTCAAATGTAGAAGCA
AGTAAAGAAAATGTGTCTCAACCAAAACGAGCCAAACGGAAATTATACACAAGTGAATTTTCATCTCCT
ATTGATATATCAGGCCAAGTGATTTTAAATGGACCAGAAAATGAAGGAGAGTGATCACCAGATTATCAA
CGACGACTTCGAACAAAAACAGCCAAATAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
    
```

**Restriction Sites:**

SgfI-MluI

**Plasmid Map:**

**ACCN:**

NM\_016195

**Insert Size:**

5343 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_016195.3](#)

**RefSeq Size:** 6339 bp

**RefSeq ORF:** 5343 bp

**Locus ID:** 9585

**UniProt ID:** [Q96Q89](#)

**Cytogenetics:** 10q23.31

**Protein Families:** Druggable Genome

**MW:** 206.1 kDa

**Gene Summary:** Plus-end-directed motor enzyme that is required for completion of cytokinesis (PubMed:11470801, PubMed:12740395). Required for proper midbody organization and abscission in polarized cortical stem cells. Plays a role in the regulation of neuronal polarization by mediating the transport of specific cargos. Participates in the mobilization of SHTN1 and in the accumulation of PIP3 in the growth cone of primary hippocampal neurons in a tubulin and actin-dependent manner. In the developing telencephalon, cooperates with SHTN1 to promote both the transition from the multipolar to the bipolar stage and the radial migration of cortical neurons from the ventricular zone toward the superficial layer of the neocortex. Involved in cerebral cortex growth (By similarity). Acts as an oncogene for promoting bladder cancer cells proliferation, apoptosis inhibition and carcinogenic progression (PubMed:17409436).[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region compared to isoform 1. The encoded isoform (2) is shorter compared to isoform 1.