

Product datasheet for **RG215061**

KIF20B (NM_016195) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KIF20B (NM_016195) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: KIF20B
Synonyms: CT90; KRMP1; MPHOSPH1; MPP-1; MPP1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG215061 representing NM_016195
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAATCTAATTTTAAATCAAGAGGGAGTACCTCGACCATCTTATGTTTTAGTGCTGACCCAATTGCAA
 GGCCTTCAGAAATAAATTCGATGGCATTAAAGCTTGATCTGTCTCATGAATTTTCCTTAGTTGCTCCAAA
 TACTGAGGCAAACAGTTTCGAATCTAAAGATTATCTCCAGGTTTGTCTTGAATAAGACCATTTACACAG
 TCAGAAAAAGAACTTGAGTCTGAGGGCTGTGTGCATATTCTGGATTACACAGACTGTTGTGCTGAAAGAGC
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AAATTATTTGGACCTGTCAAATCTTCTCAAGATGTATCACTAGACAGTAATTCAAACAGTAAAATATTAA
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 ATATCAGGCCAAGTGATTTTAAATGGACCAGAAAATGAAGGAGAGTGATCACCAGATTATCAAACGACGAC
 TTCGAACAAAAACAGCCAAA

ACGCGTACGCGGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG215061 representing NM_016195
 Red=Cloning site Green=Tags(s)

MESNFNQEGVPRPSYVFSADPIARPSEINFDGIKLDLSHEFSLVAPNTEANSFESKDYLVCLRIRPFTQ
 SEKELESEGCVHILDSQTVVLKEPQCILGRLSEKSSGQMAQKFSFVKVFPATTQKEFFQGCIMQPVKDL
 LKGQSRILIFTYGLTNSGKTYTFQGTENIGILPRTLNLVFDLSLQERLYTKMNLKPHRSREYLRLSSEQEK
 EEIASKSALLRQIKEVTVHNSDDTLYGSLTNSLNISEFEESIKEYEQANLNMANSIKFSVWVSFFEIYN
 EYIYDLFVPVSSKFQKRKMLRLSQDVKGYSF IKDLQWIQVSDSKEAYRLLKLGIKHQSVAF TKLNNASSR
 SHSIFTVKILQIEDSEMSRVIRVSEL SLCDLAGSERTMKTQNEGERLRETNINTSLLTLGKCINVLKNS
 EKSKFQQHVPFRESKLT HYFQSF FNGKGI CMIVNISQCYLADYETLNLVLFSAIAQKVCVPD TLNSSQE
 KLFGPVSSQDVSLSDNSNSKILNVKRATISWENSLEDLMEDELVEELENAEETQNVETKLLDEDLDKT
 LEENKAFISHEEKRLLDLIEDLKKKLINEKKEKLTLEFKIREEVTQEFQYWAQREADFKETLLQEREI
 LEENAERRLAIFKDLVGKCDTREEAAKD ICATKVETEEATACLELKFNQIKAELAKTKGELIKTKEELK
 RENESDSL IQELET SNKKIITQNQRIKEL INIIDQKEDT INEFQNLKSHMENTFKCNDKADTSSL IINN
 LICNETVEVPKDSKSKICSERKRVNENELQQDEPPAKKGSIHVSSAITEDQKKSEEVPRNIAEIEDIRVL
 QENNEGLRAFLLT IENELKNEKEEKAELNKQIVHFQQLSLSEKKNLTL SKEVQQIQSNYDIAIAELHVQ
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 QLTNNLQDMKHLQLKEEEEEETNRQETEKLEEL SASSARTQNLKADLQRKEEDYADLKEKLTDAKKQIK
 QVQKEVSVMRDEDKLLRIKINELEKKKNQCSQELDMKQRTIQQLKEQLNNQKVEEAIQQYERACKDLNVK
 EKIIEDMRMTLEEQEQTQVEQDQVLEAKLEEVERLATELEKWKCKNDLETKNQQRSNKEHENNTDVLGK
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 KDSDLQKWREERDQLVAALIQLKALISSNVQKDNEIEQLKRIISETSKIETQIMDIKPKRISSADPKL
 QTEPLSTSFEISRNKIEDGSVVLDSCEVSTENDQSTRFPKPELEIQFTPLQPNKMAVKHPGCTTPVTVKI
 PKARKRKSNEEEDLVKCNENKATPRNLKFPISDDRNSVKKQKVAIRPSSKKTYSLSQASIIQVNI
 LATKKKEGTLQKFGDFLQHSPSILQSKAKKI IETMSSSKLSNVEASKENVSQPKRAKRKLYTSEISSPID
 ISGQVILMDQMKESDHQIIKRRLRTKTAK

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_016195

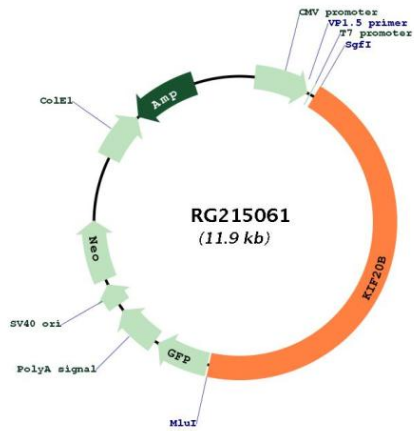
ORF Size: 5340 bp

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 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:	<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_016195.4
RefSeq Size:	6319 bp
RefSeq ORF:	5343 bp
Locus ID:	9585
UniProt ID:	Q96Q89
Cytogenetics:	10q23.31
Protein Families:	Druggable Genome
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]

Product images:



Circular map for RG215061