

Product datasheet for **RG200397**

KIF22 (NM_007317) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIF22 (NM_007317) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KIF22
Synonyms:	A-328A3.2; KID; KNSL4; OBP; OBP-1; OBP-2; SEMDJL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG200397 representing NM_007317
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCGCGGGCGGCTCGACGCAGCAGAGGCGACGCGAGATGGCGGCAGCTTCAGCGGGCGGATCTCAG
 GAGCTGGTCGCTGTCGGCTAAGCAAGATTGGAGCTACTCGTCGTCCACCTCCAGCTCGCGTAAGGGTGGC
 TGTGCGACTGCGGCCATTTGTGGATGGAACAGCGGGAGCAAGTGATCCCCCTGTGTGCGGGGCATGGAC
 AGCTGCTCTAGAGATTGCTAACTGGAGGAACCACCAGGAGACTCTCAAATACCAGTTTGTATGCCTTCT
 ATGGGGAGAGGAGTACTCAGCAGGACATCTATGCAGGTTCAAGTGCAGCCATCCTAAGGCACTTGTGGA
 AGGGCAGAATGCCAGTGTGCTTGCCTATGGACCCACAGGAGCTGGGAAGACGCACACAATGCTGGGCAGC
 CCAGAGCAACCTGGGGTATCCCGGGGCTCTCATGGACCTCTGCAGCTCACAAGGGAGGAGGGTGCCG
 AGGGCCGGCCATGGGCCCTTTCTGTACCATGTCTTACCTAGAGATCTACCAGGAGAAGGTATTAGACCT
 CCTGGACCTGCTTCGGGAGACCTGGTAATCCGAGAAGACTGCCGGGGGAATATCCTGATCCGGGTCTC
 TCCAGAAAGCCATCAGTAGCTTTGCTGATTTTGAAGCGCACTTCTGCCAGCCAGTCGAAATCGGACTG
 TAGGAGCCACCCGGCTCAACCAGCGCTCCTCCCGCAGTCATGCTGTGCTCCTGGTCAAGGTGGACACGG
 GAAACGTTTGGCCCATTTGCCAGCGAGAGGGAAACTTACCTGATTGACTTGGCTGGGTGAGAGGAC
 AACCGGCGCACAGGCAACAAGGGCCTTCGGCTAAAAGAGAGTGGAGCCATCAACACCTCCCTGTTTGTCC
 TGGGCAAAGTGGTAGATGCGCTGAATCAGGGCCTCCCTCGTGTACCTTATCGGGACAGCAAGCTCACTCG
 CCTATTGACAGGACTCTCTGGGTGGCTCAGCCCACAGTATCCTTATTGCCAACATTGCCCTGAGAGACGC
 TTCTACCTAGACACAGTCTCCGCACTCACTTTGCTGCCAGGTCCAAGGAGGTGATCAATCGGCCCTTTTA
 CCAATGAGAGCCTGCAGCCTCATGCCTTGGGACCTGTTAAGCTGTCTCAGAAAGAATTGCTTGGTCCACC
 AGAGGCAAAGAGAGCCCGAGGCCCTGAGGAAGAGGAGATTGGGAGCCCTGAGCCATGGCAGCTCCAGCC
 TCTGCCTCCAGAAACTCAGCCCTACAGAAGCTAAGCAGCATGGACCCGGCCATGCTGGAGCGCTCC
 TCAGCTTGGACCGTCTGCTTGCCTCCAGGGGAGCCAGGGGGCCCTCTGTTGAGTACCCCAAAGCGAGA
 GCGGATGGTGCTAATGAAGACAGTAGAAGAGAAGGACCTAGAGATTGAGAGGCTTAAAGACGAAGCAAAAA
 GAACTGGAGGCCAAGATGTTGGCCAGAAAGGCTGAGGAAAAGGAGAACCATTGTCCACAATGCTCCGGC
 CCCTTTCACATCGCACAGTACAGGGGCAAGCCCTGAAAAAGGCTGTGGTGTATGCCCTACAGCTAAT
 TCAGGAGCAGGCAGCATCCCAAATGCCGAGATCCACATCCTGAAGAATAAAGGCCGGAAGAGAAAGCTG
 GAGTCCCTGGATGCCCTAGAGCCTGAGGAGAAGGCTGAGGACTGCTGGGAGCTACAGATCAGCCCGGAGC
 TACTGGCTCATGGGCGCCAAAAATACTGGATCTGCTGAACGAAGGCTCAGCCCGAGATCTCCGCGTCT
 TCAGCGCATTGGCCGAAGAAGGCCAGCTAATCGTGGGCTGGCGGGAGCTCCACGGCCCTTCAGCCAG
 GTGGAGGACCTGGAACCGTGGAGGGCATAACGGGGAAACAGATGGAGTCCTTCTGAAGGCAAACATCC
 TGGGTCTCGCCGCGGCCAGCGCTGTGGCGCCTCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

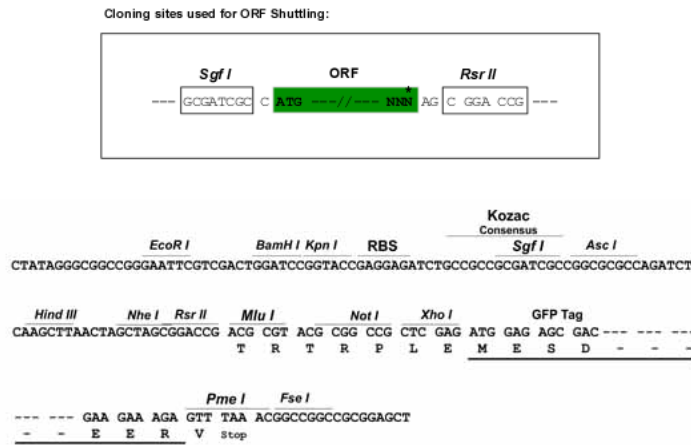
Protein Sequence: >RG200397 representing NM_007317
 Red=Cloning site Green=Tags(s)

MAAGGSTQQRREMAAASAAAISGAGRCRLSKIGATRRPPPARVVRVAVRLRPFVDGTAGASDPPCVRGMD
 SCSLEIANWRNHQETLKYQFDFYGERSTQODIYAGSVQPILRHLLLEGQNASVLAYGPTGAGKTHTMLGS
 PEQPGVIPRALMDLLQLTREEGAEGRPWALSVTMSYLEIYQEKVLDLLDPASGDLVIREDCRGNILIPGL
 SQKPISSFADFERHFLPASRNRTVGATRLNQRSSRSHAVLLVKVDQRERLAPFRQREGKLYLIDLAGSED
 NRRTGNKGLRLKESGAINSLFVLGKVVDALNQLPRVPYRDSKLTRLLQDSLGGSAHSILIANIAPERR
 FYLDTVSALNFAARSKEVINRPFNTESLQPHALGPVKLSQKELLGPPEAKRARGPEEEEEIGSPEPMAAPA
 SASQKLSPLQKLSMDPAMLERLLSLDRLLASQGSQGAPLLSTPKRERMVLMKTVEEKDLEIERLTKQK
 ELEAKMLAQKAEKENHCPTMLRPLSHRTVTGAKPLKAVVMPLQLIQEQAAASPNAEIHILKNKGRKRKL
 ESLDALEPEEKAEDCWELQISPELLAHGRQKILDLLNEGSARDLRSLQRIGPKKAQLIVGWRELHGPFSSQ
 VEDLERVEGITGQMESFLKANILGLAAGQRCGAS

SGP TRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_007317

ORF Size: 1995 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:

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_007317.1](#), [NP_015556.1](#)

RefSeq Size: 2097 bp

RefSeq ORF: 1998 bp

Locus ID: 3835

UniProt ID: [Q14807](#)

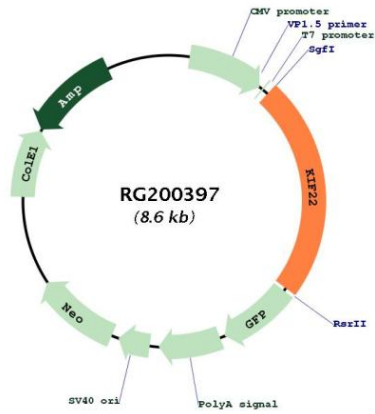
Cytogenetics: 16p11.2

Domains: kinesin, HhH1

Protein Families: Druggable Genome

Gene Summary: The protein encoded by this gene is a member of the kinesin-like protein family. The family members are microtubule-dependent molecular motors that transport organelles within cells and move chromosomes during cell division. The C-terminal half of this protein has been shown to bind DNA. Studies with the Xenopus homolog suggests its essential role in metaphase chromosome alignment and maintenance. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RG200397