

## Product datasheet for **MG214019**

### **Kif23 (NM\_024245) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kif23 (NM_024245) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kif23
Synonyms:	3110001D19Rik; C87313; CHO1; KnsI5; MKLP-1; MKLP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG214019 representing NM\_024245  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGTCAGCGAAGGCTAAGACGGTCAGAAAACCTGTAATAAAAAAAGGATCTCAGACAAACCTTAAAG  
 ATCCAGTGGGGGTGACTGTAGGGTTCGCCCCCTGAGCTTTCCTGACCAAGAATGCTGTGTGGAAGTGAT  
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 ATCCCTTGGTAGATGACCTCATTTCATGGCAAGAATGGTCTTTTATTTACATATGGCGTGACGGGAAGTGG  
 AAAAACCTACACAATGACAGGGTCTCCAGGGTCCGAGGCTGCTTCTCGTTGTTTGAATATGATCTTT  
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 GATGAGGAGACCCTTCCAAAGCTGGCTGACACTTTGGAGAAACGACATCACCTGCGACAATAATGACCG  
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 TATTGAGACTTTAAAACAAGAATTGCCAACTGGTAGTCGAAACGAAGATCGTCCACCCTAGCACCTGCC  
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 CAGGATCTCAGCTGGGACCGGGATATCAGCATCACGCACAACCGAAGCGCAAGAAACCT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG214019 representing NM\_024245  
 Red=Cloning site Green=Tags(s)

MKSAKAKTVRKPVIKKGSQTNLKDPVGVYCRVRPLSFPDQECCEVINSTTLQLHTPEGYRLNRNGDYKE  
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 NSIGSFQAKRYVFKSNDNRSM EIQCEVDALLERQKREALPIPKTPSSKRQADPEFADMINVQEFCKAEV  
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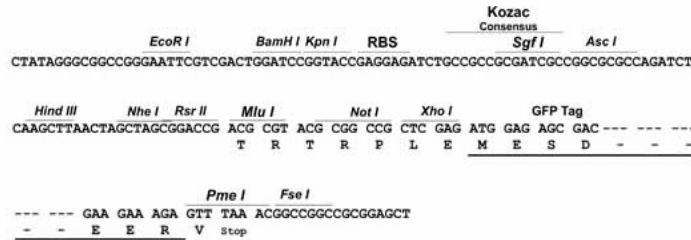
TRTRPLE - GFP Tag - V

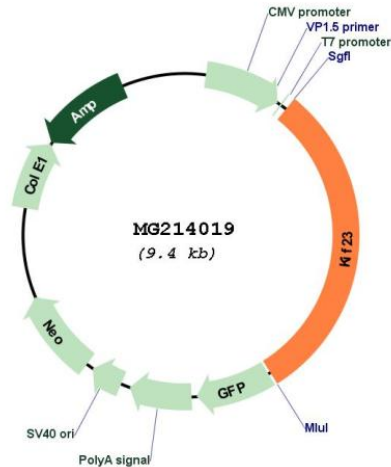
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_024245

**ORF Size:** 2859 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\\_024245.3](#)

**RefSeq Size:** 3439 bp

**RefSeq ORF:** 2862 bp

**Locus ID:** 71819

**UniProt ID:** [E9Q5G3](#)

**Cytogenetics:** 9 B

**Gene Summary:**

Component of the centralspindlin complex that serves as a microtubule-dependent and Rho-mediated signaling required for the myosin contractile ring formation during the cell cycle cytokinesis. Essential for cytokinesis in Rho-mediated signaling. Required for the localization of ECT2 to the central spindle. Plus-end-directed motor enzyme that moves antiparallel microtubules in vitro (By similarity).[UniProtKB/Swiss-Prot Function]