

## Product datasheet for **MG211920**

### Kif24 (NM\_024241) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kif24 (NM_024241) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kif24
Synonyms:	4933425J19Rik; 9430029L23Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211920 representing NM_024241 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCATCCTGGTTATATGAGTGTCTTTGTGAGGCTGAGCTTGCACAGTATTATCCTCATTTTACTGCGC  
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CCGAAGACAACATGATTTTCTCTCTCTGCCAGCAAAGATAAAATGGCCAACAATGAAACAGGCAG  
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CAAGAGAAGATAGCAAGCATGTGGTACAGATAGCTGGCCTTCGAGAGCTCCAAGTGGACAGTGTGGAGCT  
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CGCGGAGATCAACCAGAGTCTTCTGGCTCTGAAAGAATGTATCCGAGCACTGGACCAGGAACACACCCAC



ACGCCTTTCAGGCAGAGCAAACCTGACTCAGGTCCTGAAGGACTCTTTCATTGGCAATGCCAAAACCTGCA  
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GAAAACATCCTACAGGGTTAGCTGCCAGGAGCTGTTTCTCTACAGATTCCAACAAGCCTCATTACAA  
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GGATTCTAATGATTTTGAAGATTTTGTGACCCAGCTGGATGAAATCATGGCTTTGAAGTCCAGGTGCATC  
CAAAGTCTGAGAAGCCAGCTACAGCTCTACCTACCAGCCACAGGCCGCTGCAGCCCCGAAAGAACTG  
TGGTGTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211920 representing NM\_024241  
 Red=Cloning site Green=Tags(s)

MASWL YECLCEAELAQYYPHFTALGLQKIDELAKVTMKDYSRLGVHDMNDRKRLFQLIKI IKIMQEEDKA  
 LGIPEHPLQASSLYTKPREFRSGPRRQLHFDSPSASKDKMANNETGSLSNF SVDEQKSTYLKVLHMLPD  
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 NPWTEMEKIRVCVRKRPLGVREVRREVNVTIVEDKETLLVHEKKEAVDLTQYILQHVFYFDEVFGEACS  
 NQDVYLLKTAHPLIQHIFNGGSATCFAYGQTGAGKTYTMI GTHQNPGLYALAAKDIFRQLKVSQSRRL FV  
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 SRSHAI IQIKDSAKRTFGRISFIDLASERAADARDSDRQTKMEGAEINQSLLALKECIRALDQEHTH  
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 ASPKRIQSSPVTLPGDKCSPKKVGLGLQQLTVAPGPTKVKAHPLASHVNPVPTSGPKTPGKSSSRGS  
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 ERSGSSFFLHQDREHSPEEQAAERQQCLLFSSETDGSKKRPAWSVYSRDPIISHRRGALSQSHSPSMVC  
 PDWSKEEDSASSGSPKDNRAQKPSQVDFVHHQKPGAQVSDIRLEAFTSEVPEQAEGSLSSPSPENG  
 LSFPLSHVAVSGSPDQRDRVCTPLREVENRVTHTPGRVNSSTPFQEDSGEQIQMCSANASGLMAPLTMS  
 LLETACHEDLSSLEQIAQDGAGYGFMAEIVGGPAAGHTVPSYDQEAALPVSSATECLWSSSPDNRPSG  
 DLPALSPSPIHQHSPDKLPGREAYQTRRPILLPENHMGSKL YDDRAEETELGGSLTFPRKPSNIIHAGVP  
 YSTPFLTSCTGSSNGVGRPWAQERKHPTGVSCQELVSSTDSNKPHYNEDIAWLRHRPISRCLDSDSPVVP  
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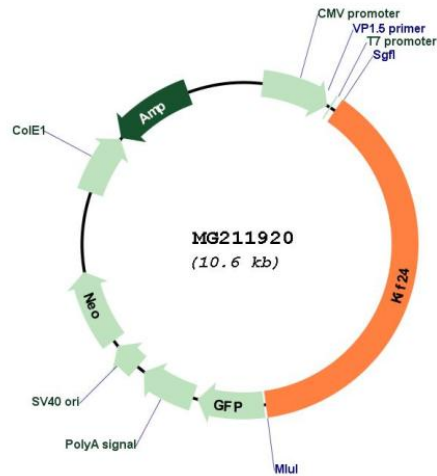
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_024241

**ORF Size:** 4068 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\\_024241.2](#), [NP\\_077203.2](#)

**RefSeq Size:** 5616 bp

**RefSeq ORF:** 4071 bp

**Locus ID:** 109242

**UniProt ID:** [Q6NWW5](#)

**Cytogenetics:** 4 A5

**Gene Summary:**

Microtubule-dependent motor protein that acts as a negative regulator of ciliogenesis by mediating recruitment of CCP110 to mother centriole in cycling cells, leading to restrict nucleation of cilia at centrioles. Mediates depolymerization of microtubules of centriolar origin, possibly to suppress aberrant cilia formation. Following activation by NEK2 involved in disassembly of primary cilium during G2/M phase but does not disassemble fully formed ciliary axonemes. As cilium assembly and disassembly is proposed to coexist in a dynamic equilibrium may suppress nascent cilium assembly and, potentially, ciliar re-assembly in cells that have already disassembled their cilia ensuring the completion of cilium removal in the later stages of the cell cycle (By similarity).[UniProtKB/Swiss-Prot Function]