

## Product datasheet for **MG211297**

### **Kif5c (NM\_008449) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kif5c (NM_008449) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kif5c
Synonyms:	Khc; KINN; NKHC; NKHC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG211297 representing NM\_008449  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGATCCAGCCGAATGCAGCATCAAAGTGATGTGCCGGTCCGGCCCTCAACGAAGCGGAGATCC  
 TCCGCGGGGACAAATTCATCCCCAAATCAAGGCGAGGAGACGGTGGTATCGGGCAAGGAAGCCGTA  
 TGTCTTTGACCGAGTGCTGCCGCCAACACAACCCAGGAGCAGGTCTACAATGCCTGTGCAAAGCAGATT  
 GTCAAAGATGTCCTTGAGGGTTAATGGAACAATTTTTGCATATGGGCAGACTTCATCAGGAAAACTC  
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 CTGGGAGTGAAAAAGTCAAGAAAACCGTCCGAGGGAGCTGTTCTTGATGAAGCTAAAAATATCAACAA  
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 GGAGAGTGCCAGATGGACTCTAACAGGAAGATGAACGCCAGTGAGCGGAGCTGGCAGCGTGCCAGTTG  
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 AACATGGCCAGGAGGGCACATTCGGCTCAGATCGCCAAGCCATCCGCCAGGCCATTACCCAGCATCAT  
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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

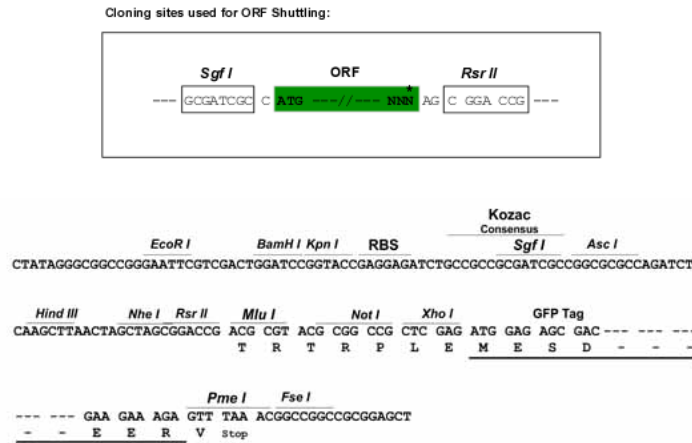
Protein Sequence: >MG211297 representing NM\_008449  
 Red=Cloning site Green=Tags(s)

MADPAECSIKVMCRFRPLNEAEILRGDKFIPKFKGEETVVIGQGKPYVFDRLVPPNTTQEQVYNACAKQI  
 VKDVLLEGYNGTIFAYGQTS SSGKTHMEGKLHDPQLMGIIPRIAHDI F DHIYSMDENLEFH IKVS YFEIYL  
 DKIRDL LDVSKTNLAVHEDKNRVPYVKGCTERFVSSPEEVM DVIDEGKANRHVAVTNMNEHSSRSHSIFL  
 INIKQENVETEKKLSGKLYLVDLAGESEKVSKTGAEGAVLDEAKNINKLSALGNVISALAEGTKTHVPYR  
 DSKMTRILQDSLGGNCRTTIVICCSPSVFNEAETKSTLMFGQRAKTIKNTVSVNLELTAE EWKKKYEKEK  
 EKNKALKSVLQHLEMELNRWRNGEAVPEDEQISAKDQKSL EPCDNTP I IDNITPVVDGISA EKEKYDEEI  
 TSLYRQLDDK DDEINQSSQLAEK LKQQLDQDELLASTRRDYEKIQEELTRLQIENEA AKDEVKEVLQAL  
 EELAVNYDQKSQEVEDKTRANEQLTDELAQKTTT LTTTQRELSQLQELSNHQKRATEILNLLKDLGEI  
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 LISQHEAKIKSLTDYMQNMEQRRQLEESQDSLSEELAKLRAQEKMHEVSFQDKEKEHLTRLQDAEEVKK  
 ALEQQMESHREAHQKQLSRLRDEIEEKQRIIDEIRDLNQLQLEQERLSSDYNKLIKIEDQEREVKLEKLL  
 LLNDKREQAREDLKGLEETVSRELQTLHNL RKL FVQDL TTRVKKSVELSDDDGGGSA AQKQKISFLENNL  
 EQLTKVHKQLVRDNADLRCEL PKLEKRLRATAERVKAL ESALKEAKENAMRDRKRYQQEVDRIKEAVRAK  
 NMARRAHSQAIAKPIRPGHYPASSPTAVHAVRGGGGSSNSTHYQK

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_008449

ORF Size: 2868 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 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\\_008449.3](#)

**RefSeq Size:** 6867 bp

**RefSeq ORF:** 2871 bp

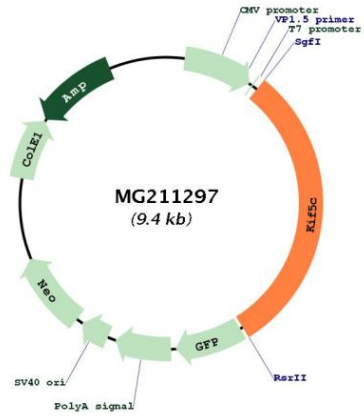
**Locus ID:** 16574

**UniProt ID:** [P28738](#)

**Cytogenetics:** 2 28.68 cM

**Gene Summary:** Involved in synaptic transmission (By similarity). Kinesin is a microtubule-associated force-producing protein that may play a role in organelle transport. Mediates dendritic trafficking of mRNAs (PubMed:19608740). Required for anterograde axonal transportation of MAPK8IP3/JIP3 which is essential for MAPK8IP3/JIP3 function in axon elongation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG211297