

## Product datasheet for **MG210688**

### **Kifap3 (BC049100) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kifap3 (BC049100) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kifap3
Synonyms:	KAP3, SMAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG210688 representing BC049100  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAAGCGGAGGACGCCAGATACCTCAAAGGAAAGTTAAAGGGGGAATATTGATGTACATCCATCAG  
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**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

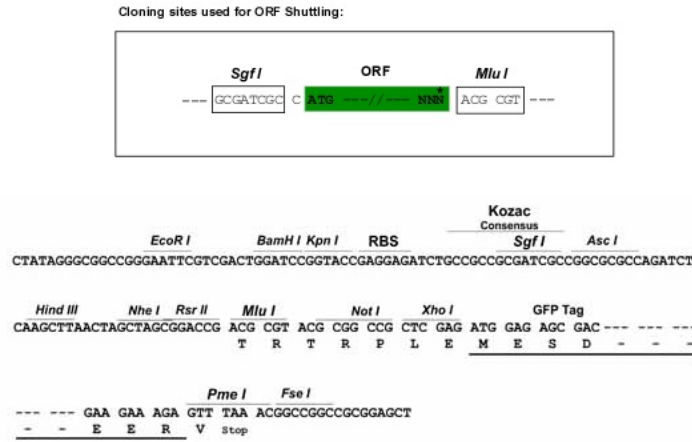
**Protein Sequence:** >MG210688 representing BC049100  
 Red=Cloning site Green=Tags(s)

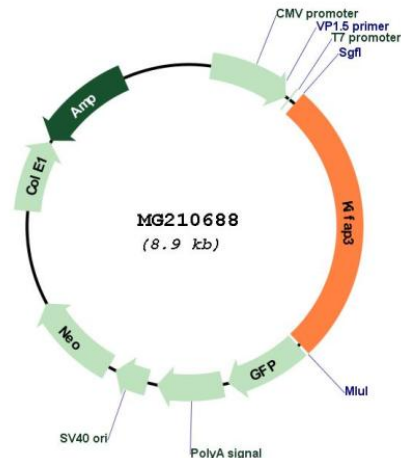
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 LLYEDIPDKVRSALILQLARNPDNLEELLNETALGALARVLRWDKQSVELATNIIYIFFCFSSFSHF  
 HGLITHYKIGALCMNIIDHELKRHELWQEELSKKKKAVDEDLENQTLRKDYDKTFKKYQGLVVKQEQLLR  
 VALYLLLNLAEDTRTELKMRNKNIIVHMLVKALDRDNFELLILVVSFLKKSIFMENKNDMVMEDIVEKLV  
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 EDDLVLVVMIGITVSMDDSCAALLAKSGIIPALIELLNAQQEDEFVCQIIYVYQVMVFHQATRDVVIK  
 ETQAPAYLIDLMHDKNNEIRKVCNTLDIIAEYDEEWAKKIQSEKFRWHNSQWLEMVESRQLDESEQYLY  
 GDDRIEPIYIHEGDILERPDLFYNSDGLITSEGAISPDDFNFDFHLQNGDVVQGHAFPGSLGMDGFGQPLGI  
 LGRPATAYGFRPDEPYYSFSGSR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** BC049100

**ORF Size:** 2379 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:** [BC049100.1](#)

**RefSeq Size:** 3952 bp

**RefSeq ORF:** 2381 bp

**Locus ID:** 16579

**Cytogenetics:** 1 H2.1

**Gene Summary:**

The protein encoded by this gene is the non-motor subunit of kinesin-2 complex, and forms a heterotrimer with two members of the kinesin superfamily of proteins that together form a microtubule plus-end directed translocator that plays an important role in intracellular transport, mitosis, and cell-cell adhesion. This protein contains multiple armadillo repeats involved in protein binding, and may serve as an adaptor to regulate binding of cargo with the motor proteins. Conditional disruption of this gene in mouse neural precursor cells caused a tumor-like phenotype and defective organization of the neuroepithelium thought to be the result of altered N-cadherin subcellular localization. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]