

## Product datasheet for **RC205208**

### **KIFAP3 (NM\_014970) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KIFAP3 (NM_014970) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIFAP3
Synonyms:	dj190116.1; FLA3; KAP-1; KAP-3; KAP3; SMAP; Smg-GDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC205208 representing NM\_014970  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAAGGGGAGGACGCCAGATACCTCAAAGGAAAGTTAAAGGAGGGAATATAGATGTACATCCATCAG  
 AAAAAGCACTCATTGTTCACTATGAAGTGAAGCTACCATTCTTGAGAAATGGGGACCCCATGTTGGG  
 AGAACGAAAAGAATGTCAAAAAATCATTGACTTAAGAGTCTCAATGCCAACACAGATATAAATTCCCTG  
 GCAAGGAAGTGGTTGAAGAATGTAAGTCACTTCAAACTAAATGAGGTAGAACAGCTGTTGT  
 ACTATCTACAGAACCCTGATTGATTGTCAGGAAAAGAGAAAAAGAAAAATCAAGCAAGCTAAAGA  
 TCCACCTCCTTTGAAGGAATGGAGATTGATGAAGTTGCTAACATTAATGACATGGATGAATATATTGAG  
 TTATTATATGAAGATATTCCTGACAAAGTTCGGGGTCTGCTTTGATCCTGCAGCTTGTCTGAAATCCTG  
 ATAAGTGAAGAACTACTATTGAATGAACTGCCCTTGGTGCATTAGCAAGGGTCTGAGAGAAGACTG  
 GAAGCAAAGTGTGAGTTAGCTACAACATAATTTACATCTTTTTTTGTTTCTCCAGCTTTTCTCAATTT  
 CATGGACTTATTACTACTATAAAATTGGAGCTCTGTGTATGAATATTATTGATCATGAGTTAAAAAGAC  
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 GAGAAAGGATTATGAAAAACCTTTAAAAAGTACCAGGGGCTTGTGGTAAAAACAGGAACAGCTATTACGA  
 GTTGCTCTTTATTTGCTTCTGAATCTTGCTGAGGATACTCGTACCGAACTGAAAAAGAGGAACAAGAACA  
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 AAAATGATACCTTGTGAGCATGAAGACCTGCTGAATATCACCTCCGACTTTTACTAAACCTTACCTTTG  
 ACACAGGACTGAGGAATAAGATGGTACAAGTTGGACTGCTTCCCAAGCTCACTGCATCTAGGCAATGA  
 CAACTACAAACAATAAGCAATGTGTCTTTTACCACATAAGCATGGATGACCGCTTTAAATCAATGTTT  
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 AACTCATTTCTTTCTGCATTAATCTTGCTGCTAACAAAAGAAATGTACAGCTTATCTGTGAAGGAAATGG  
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 TCTCAGCATGATGGACCAACTAAAAATCTGTTTATTGATTATGTTGGGGACCTTGACGCCAGATCTCTA  
 ATGATGAAGAAGAGGAGTTTGTGATTGAATGTTTGGGAACTCTTGCAAACCTTGACCATTCCAGACTTAGA  
 CTGGGAATTGGTCTTAAAGAATAAAGTTGGTCCATACCTCAAGGATAAACTAAAACCAGGTGCTGCA  
 GAAGATGATCTTGTGTTTGAAGTGGTTAATGATTGGAAGTGTATCCATGGATGACTCTTGTGCTGCAT  
 TGCTAGCCAAATCTGGCATAATCCCTGCACTCATTGAATTGCTAAATGCTCAACAAGAAGATGATGAATT  
 TGTGTGTCAGATAATTTATGCTTCTACCAGATGGTTTTCCACCAAGCCACAAGAGAGCTCATAATCAAG  
 GAAACACAGGCTCCAGCATATCTCATAGACCTAATGCATGATAAGAATAATGAAATCCGAAAGGTCTGTG  
 ATAATACATTAGATATTATAGCGGAATATGATGAAGAAATGGGCTAAGAAAATTCAGAGTGAAAAGTTTCG  
 CTGGCATAACTCTCAGTGGCTGGAGATGGTAGAGAGTCGTGAGATGGATGAGAGTGAGCAGTACTTGTAT  
 GGTGATGATCGAATTGAGCCATACATTCATGAAGGAGATATTCTCGAAAGACCTGACCTTTTCTACAAC  
 CAGATGGATTAATTGCCTCTGAAGGAGCCATAAGTCCCGATTTCTCAATGATTACCACCTTCAAATGG  
 AGATGTTGTTGGGCAGCATTCTTTCTGGCAGCCTTGGAAATGGATGGCTTTGGCCAACCAAGTTGGCATT  
 CTTGGACGCCCTGCCACAGCATATGATTCCGCCCTGATGAACCTTACTACTATGGCTATGGATCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205208 representing NM\_014970  
Red=Cloning site Green=Tags(s)

MQGEDARYLKRKVKGGNIDVHPSEKALIVHYEVEATILGEMGDPMLGERKECQKIIRLKSLNANTDITSL  
ARKVVVEECKLIHPSKLNVEQLLYLQNRDLSLGGKEKKEKSSPKDPPPFEGMEIDEVANINDMDEYIE  
LLYEDIPDKVRSALILQLARNPDNLEELLLNETALGALARVLREDWKQSVELATNIIYIFFCFSSFSQF  
HGLITHYKIGALCMNIIDHELKRHELWQEELSKKKKAVDEDPENQTLRKDYEKTFKKYQGLVVKQEQLLR  
VALYLLLNLAEDTRTELKMRNKNIHVMLVKALDRDNFELLILVVSFLKKL SIFMENKNDMVEMDIVEKLV  
KMIPCEHEDLLNITLRLLLLNLSFDTGLRNKMVQVGLLPKLTALLGNDNYKQIAMCVLYHISMDDRFKSMF  
AYTDCIPQLMKMLFECSDERIDLELISFCINLAANKRNVQLICEGNLKMMLKRALKFKDPLLMMKIRNI  
SQHDGPTKNLFDYVGDAAQISNDEEEEFVIECLGTLANLTIPDLWELVLKEYKLVPLYKDKLPGAA  
EDDLVLEVVMIGTVSMDDSCAALLAKSGIIPALIELLNAQQEDEFVCQIIYVFYQMVFHQATRDV IIK  
ETQAPAYLIDLMDKNNEIRKVCNTLDIIAEYDEEWAKKIQSEKFRWHNSQWLEMVESRQMDSEQYLY  
GDDRIEPIYIHEGDILERPDLFYNSDGLIASEGAI SPDFFN DYHLQNGDVVGQHSFPGSLGMDGFGQPVGI  
LGRPATAYGFRPDEPYYYGYGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8112\\_h09.zip](https://cdn.origene.com/chromatograms/mk8112_h09.zip)

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_014970

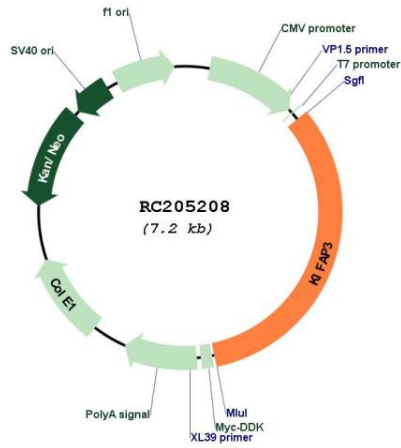
**ORF Size:** 2376 bp

**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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_014970.4</a>
<b>RefSeq Size:</b>	3011 bp
<b>RefSeq ORF:</b>	2379 bp
<b>Locus ID:</b>	22920
<b>UniProt ID:</b>	<a href="#">Q92845</a>
<b>Cytogenetics:</b>	1q24.2
<b>Domains:</b>	Armadillo_seg
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	91.2 kDa
<b>Gene Summary:</b>	<p>The small G protein GDP dissociation stimulator (smg GDS) is a regulator protein having two activities on a group of small G proteins including the Rho and Rap1 family members and Ki-Ras; one is to stimulate their GDP/GTP exchange reactions, and the other is to inhibit their interactions with membranes. The protein encoded by this gene contains 9 'Armadillo' repeats and interacts with the smg GDS protein through these repeats. This protein, which is highly concentrated around the endoplasmic reticulum, is phosphorylated by v-src, and this phosphorylation reduces the affinity of the protein for smg GDS. It is thought that this protein serves as a linker between human chromosome-associated polypeptide (HCAP) and KIF3A/B, a kinesin superfamily protein in the nucleus, and that it plays a role in the interaction of chromosomes with an ATPase motor protein. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]</p>

Product images:



Circular map for RC205208