

Product datasheet for **RG205208**

KIFAP3 (NM_014970) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIFAP3 (NM_014970) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KIFAP3
Synonyms:	dj190116.1; FLA3; KAP-1; KAP-3; KAP3; SMAP; Smg-GDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205208 representing NM_014970
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAAGGGGAGGACGCCAGATACCTCAAAGGAAAGTTAAAGGAGGGAATATAGATGTACATCCATCAG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

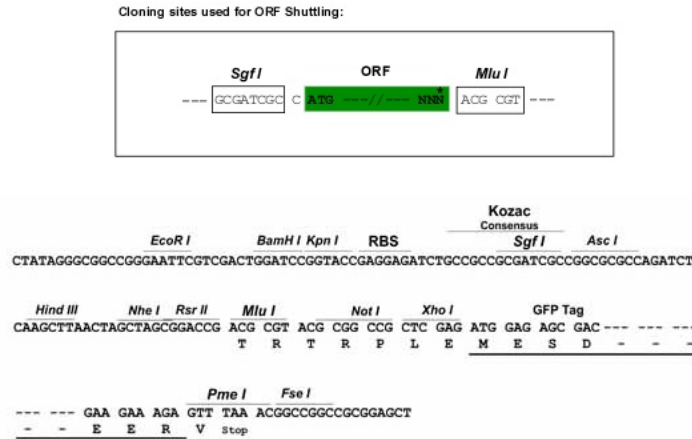
Protein Sequence: >RG205208 representing NM_014970
 Red=Cloning site Green=Tags(s)

MQGEDARYLKRKVKGGNIDVHPSEKALIVHYEVEATILGEMGDPMLGERKECQKIIRLKSLNANTDITSL
 ARKVVEECKLIHPSKLEVEQLLYLQNRDLSL SGKEKKEKSSKPKDPPPFEGMEIDEVANINDMDEYIE
 LLYEDIPDKVRSALILQLARNPDNLEELLNETALGALARVLRWDKQSVELATNIIYIFFCFSSFSQF
 HGLITHYKIGALCMNIIDHELKRHELWQEELSKKKKAVDEDPENQTLRKDYEKTFKKYQGLVVKQEQLLR
 VALYLLLNLAEDTRTELKMRNKNIHVHMLVKALDRDNFELLILVVSFLKKL SIFMENKNDMVMEMDIVEKLV
 KMIPCEHEDLLNITLRLLLLNLSFDTGLRNKMVQVGLLPKLTALLGNDNYQIAMCVLYHISMDDRFKSMF
 AYTDCIPQLMKMLFECSDERIDLELISFCINLAANKRNVQLICEGNLKMMLKRALKFKDPLLMMKIRNI
 SQHDGPTKNLFDIVYVDLAAQISNDEEEFVIECLGTLANLTIPDLDWELVLKEYKLVPLYKDKLKPGAA
 EDDLVLVVMIGITVSMDDSCAALLAKSGIIPALIELLNAQQEDEFVCQIIYVYQMVFHQATRDVVIK
 ETQAPAYLIDLMHDKNNEIRKVCNTLDIIAEYDEEWAKKIQSEKFRWHNSQWLEMVESRQMDSEQYLY
 GDDRIEPIYIHEGDILERPDLFYNSDGLIASEGAI SPDFNFNDYHLQNGDVVGQHSFPGSLGMDGFGQPVGI
 LGRPATAYGFRPDEPYYYGYGS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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 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_014970.4](#)

RefSeq Size: 3011 bp

RefSeq ORF: 2379 bp

Locus ID: 22920

UniProt ID: [Q92845](#)

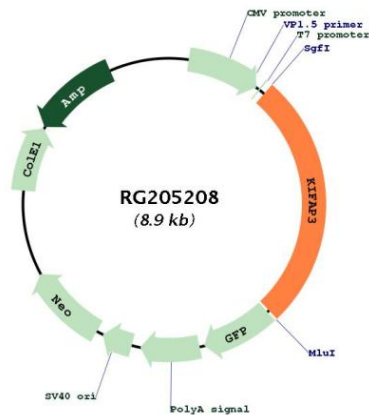
Cytogenetics: 1q24.2

Domains: Armadillo_seg

Protein Families: Druggable Genome

Gene Summary:

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]

Product images:


Circular map for RG205208