

Product datasheet for **RG234831**

KIFAP3 (NM_001204517) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIFAP3 (NM_001204517) 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:

>RG234831 representing NM_001204517
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGGGACCCCATGTTGGGAGAACGAAAAGAATGTCAAAAAATCATTGACTTAAGAGTCTCAATGCCA
 ACACAGATATAACTTCCCTGGCAAGGAAGGTGGTTGAAGAATGTAAGTCACTTTCATCCTTAAAACTAAA
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 ACCTGACCTTTTCTACAACCTCAGATGGATTAATTGCCTCTGAAGGAGCCATAAGTCCCGATTTCTCAAT
 GATTACCACCTTCAAAATGGAGATGTTGTTGGGCAGCATTCAATTCCTGGCAGCCTTGAATGGATGGCT
 TTGGCCAAACAGTTGGCATTCTTGGACGCCCTGCCACAGCATATGGATTCCGCCCTGATGAACCTTACTA
 CTATGGCTATGGATCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG234831 representing NM_001204517
Red=Cloning site Green=Tags(s)

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MGDPMLGERKECQKIIRLKSLNANTDITSLARKVVEECKLIHPSKLNVEQQLLYLQNRDSL SGKEKKE
KSSKPKDPPPFEGMEIDEVANINDMDEYIELLYEDIPDKVRSALILQLARNPDNLEELLNETALGALA
RVLREDWKQSVELATNIIYIFFCFSSFSQFHGLITHYKIGALCMNIIDHELKRHELWQEELSKKKKAVDE
DPENQTLRKDYKTFKKYQGLVVKQEQLLRVALYLLNLAEADTRTELKMRNKNI VHMLVKALDRDNFELL
ILVVSFLKKL SIFMENKNDMVE MDIVEKLVKMIPCEHEDLLNITLRLLLNLSFDTGLRNKMVQVGLLPKL
TALLGNDNYKQIAMCVLYHISMDDRFKSMFAYTDCIPQLMKMLFECSDERIDLELISFCINLAANKRVQ
LICEGNLKMMLKRALKFKDPLLMK MIRNISQHDGPTKNLFDIVYVDLAAQISNDEEEEFVIECLGTLAN
LTIPDLDWELVLKEYKLV P YLKD K LKPGA AEDDLVLEVVIMIGTVSMDDSCAALLAKSGIIPALIELLNA
QQEDDEFVCQIIYVFYQMVFHQATR DVIKETQAPAYLIDLMHDKNNEIRKVCNTLDIIAEYDEEWAKK
IQSEKFRWHNSQWLEMVESRQ MDESEQYL YGDDRIEPIYIHEGDILERPDLFYNSDGLIASEGAI SPDFFN
DYHLQNGDVVGGHSFPGSLGMDGFGQPVGILGRPATAYGFRPDEPYYYGYGS
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001204517

ORF Size: 2256 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_001204517.1](#), [NP_001191446.1](#)

RefSeq Size: 4120 bp

RefSeq ORF: 2259 bp

Locus ID: 22920

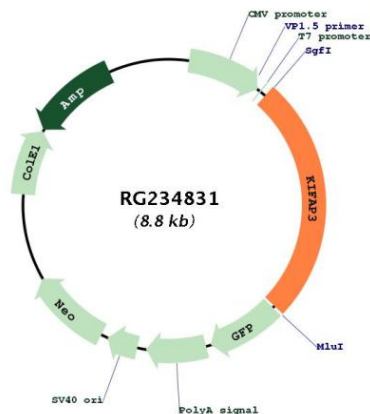
UniProt ID: [Q92845](#)

Cytogenetics: 1q24.2

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 RG234831