

Product datasheet for **RG234821**

KIFAP3 (NM_001204516) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIFAP3 (NM_001204516) 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:

>RG234821 representing NM_001204516
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAAGGGGAGGACGCCAGATACCTCAAAGCATTTCGACTTAAGAGTCTCAATGCCAACACAGATATAA
 CTTCCTGGCAAGGAAGGTGTTGAAGAATGTAACTCATTTCCTTCAAACCTAAATGAGGTAGAACA
 GCTGTTGTACTATCTACAGAACCCTGATTCATTGTCAGGAAAAGAGAAAAAAGAAAAATCAAGCAAG
 CCTAAAGATCCACCTCCTTTGAAGGAATGGAGATTGATGAAGTTGCTAACATTAATGACATGGATGAAT
 ATATTGAGTTATTATGAAGATATTCCTGACAAAGTTCGGGTTCTGCTTTGATCCTGCAGCTTCTCG
 AAATCCTGATAACTTGAAGAATACTATTGAATGAACTGCCCTTGGTGCATTAGCAAGGGTCTGAGA
 GAAGACTGGAAGCAAAGTGTGAGTTAGCTACAAACATAATTTACATCTTTTTTTGTTTCCAGCTTTT
 CTCAATTTTCATGGACTTATTACTCACTATAAAATTGGAGCTCTGTGTATGAATATTATTGATCATGAGTT
 AAAAGACATGAGCTTTGGCAAGAAGAACTCTCAAAGAAGAAGAAAGCTGTTGATGAAGACCTGAAAAC
 CAAACCTTGAGAAAGGATTATGAAAAAACCCTTAAAAAGTACCAGGGCTTGTGGTAAAAACGGAACAGC
 TATTACGAGTTGCTCTTTATTTGCTTCTGAATCTTGTCTGAGGATACTCGTACCGAACTGAAAATGAGGAA
 CAAGAACATAGTTCACATGTTGGTGAAGCCCTTGATCGGGACAATTTTGAGCTGCTAATTTTAGTTGTG
 TCATTTCTGAAGAACTCAGCATTTTTATGGAGAATAAAAATGATATGGTGGAAATGGATATTGTTGAAA
 AACTGGTGAAGATGATACCTTGTGAGCATGAAGACCTGCTGAATATCACCTCCGACTTTTACTAAACCT
 ATCCTTTGACACAGGACTGAGGAATAAGATGGTACAAGTTGGACTGCTTCCCAAGCTCACTGCACCTCA
 GGCAATGACAACACAAACAAATAGCAATGTGTGTTCTTACCACATAAGCATGGATGACCGCTTTAAAT
 CAATGTTTGCATACACTGACTGTATACCACAGTTAATGAAGATGCTGTTTGAATGTTGATGAACGAAT
 TGACTTGGAACTCAATTTCTTCTGCATTAATCTTGTCTGCTAACAAAAGAAATGTACAGCTTATCTGTGAA
 GGAAATGGGCTGAAGATGCTCATGAAGAGGCTCTGAAGTTTAAAGATCCATTGCTGATGAAAATGATTA
 GAAACATTTCTCAGCATGATGGACCAACTAAAAATCTGTTTATTGATTATGTTGGGGACCTTGCAGCCCA
 GATCTCTAATGATGAAGAAGAGGAGTTTGTGATTGAATGTTTGGGAACTTTGCAAACCTTGACCATTCCA
 GACTTAGACTGGGAATTGGTTCTTAAAGAATAAAGTTGGTTCCATACCTCAAGGATAAACTAAAACAG
 GTGCTGCAGAAGATGATCTTGTGTTTGAAGTGGTTATAATGATTGGAAGTGTATCCATGGATGACTCTTG
 TGCTGCATTGCTAGCCAAATCTGGCATAATCCCTGCACCTATTGAATTGCTAAATGCTCAACAAGAAGAT
 GATGAATTTGTGTGTCAGATAATTTATGTCTTCTACCAGATGGTTTTCCACCAAGCCACAAGAGACGTCA
 TAATCAAGGAAACACAGGCTCCAGCATATCTCATAGACCTAATGCATGATAAGAATAATGAAATCCGAAA
 GGTCTGTGATAATACATTAGATATTATAGCGGAATATGATGAAGAATGGGCTAAGAAAAATTCAGAGTGAA
 AAGTTTCGCTGGCATAACTCTCAGTGGCTGGAGATGGTAGAGAGTCGTCAGATGGATGAGAGTGAGCAGT
 ACTTGTATGGTGTGATCGAATTGAGCCATACATTCATGAAGGAGATATTCTCGAAAGACCTGACCTTTT
 CTACAACCTCAGATGGATTAATTGGCTCTGAAGGAGCCATAAGTCCCGATTCTTCAATGATTACCACCTT
 CAAAATGGAGATGTTGTTGGGCAGCATTCAATTTCTGGCAGCCTTGGAAATGGATGGCTTTGGCCAACCAG
 TTGGCATTCTTGGACGCCCTGCCACAGCATATGGATTCCGCCCTGATGAACCTTACTACTATGGCTATGG
 ATCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG234821 representing NM_001204516
Red=Cloning site Green=Tags(s)

MQGEDARYLKSIRLKSLNANTDITSLARKVVEECKLIHPSKLNVEVQLLYLQNRDRSLSGKEKKEKSSK
 PKDPPPFEGMEIDEVANINDMDEYIELLYEDIPDKVRSALILQLARNPDNLEELLNETALGALARVLR
 EDWKQSVELATNIYIFFCFSSFSQFHGLITHYKIGALCMNIIDHELKRHELWQEELSKKKKAVDEDPEN
 QTLRKDYECTFKKYQGLVVKQEQLLRVALYLLNLAEDTRTELKMRNKNI VHMLVKALDRDNFELLILVV
 SFLKKLISIFMENKNDMVEMDIVEKLVKMIPCEHEDLLNITLRLLLNLSFDTGLRNKMVQVGLL PKLTALL
 GNDNYKQIAMCVLYHISMDDRFKSMFAYTDCIPQLMKMLFECSDERIDLELISFCINLAANKRNVLICE
 GNGLKMLMKRALKFKDPLLKMKIRNISQHDGPTKNLFDYVGDAAQISNDEEEEFVIECLGTLANLTIP
 DLDWELVLKEYLVPYLKDKLKPAAEDDLVLEVVIMIGTVSMDDSCAALLAKSGIIPALIELLNAQQED
 DEFVCQIYVVFYQMVFHQATRDVIKETQAPAYLIDLMDKNNEIRKVCNTLDIIAEYDEEWAKKIQSE
 KFRWHNSQWLEMVESRQMDSEQYLYGDDRIEPIHEGDILERPDLFYNSDGLIASEGAI SPDFNFNDYHL
 QNGDVGQHSFPGSLGMDGFGQPVGILGRPATAYGFRPDEPYYYGYGS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001204516

ORF Size: 2244 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_001204516.1](#), [NP_001191445.1](#)

RefSeq Size: 2879 bp

RefSeq ORF: 2247 bp

Locus ID: 22920

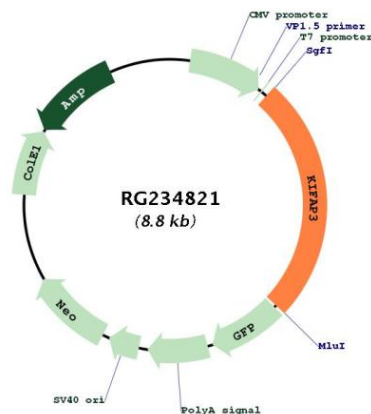
UniProt ID: [Q92845](#)

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 RG234821