

Product datasheet for **RG205352**

KLHL21 (NM_014851) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	KLHL21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG205352 representing NM_014851
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGCGACCGCGCCCTGGCCGTGCTTCCCTTCTCGGACCCCGCGCACGCCCTGAGCCTGCTGCGCG
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 CCCGCGCACCGTGCCTGCTGGCCGCCGAGCCCTACTTCCGCGCCATGTTGCGGGGCGAGCTGCGC
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 GTTCCCGGCGGTGAAGGAGGCGTGGGGGCTTCTGACGACGACGCTGACCTGGCCAACCTGCTGGAC
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 GAATGGGACAAGATCCCGTCCATGAATCAGGTACATGTGGGGGCGAGCCTGGCCGCTCTTGGGGGGAAGC
 TGTACGTCTCTGGGGATACGACAATACATTTGAACTCTCGGACGTGGTAGAGGCTATGACCCAGAGAC
 TCGCGCGTGGAGCGTGGTGGGCGGCTCCAGAACCCACCTTCTGGCATGGCAGTGTGAGCATCTCCGC
 CAGTTTCATGCCCCAGACCTTCTCGGTGGGCGTGGCTTCGAGTTGGACAGTGGCAGCGATGACATGGACC
 CAGGCCGACCCCGCGCGCGGGACCCCGATGAGCTGCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

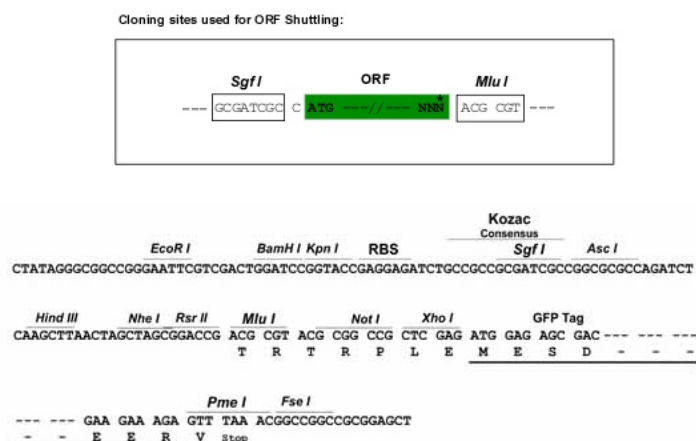
Protein Sequence: >RG205352 representing NM_014851
 Red=Cloning site Green=Tags(s)

MERPAPLAVLPFSDPAHALSLLRGLSQLRAERKFLDVTLEAAGGRDFPAHRAVLAAASPYFRAMFAGQLR
 ESRAERVRLHGVPPDMLQLLLDFSYTGRVAVSGDNAEPLLRADLLQFPVKEACGAFLQQQLDLANCLD
 MQDFAEAFSCSLASAAQRFILRHVGELGAEQLERLPLARLLRYLRDDGLCVPKEEAAYQLALRWVRADP
 PRRAAHWPQLLEAVRLPFVRRFYLLAHVEAEPLVARCPPCLRLREARDFQAARYDRHGRGPCPRMRPRP
 STGLAEILVLVGGCDQDCDELVTVCYNPQTGWRYLAEFPDHLGGYSIVALGNDIYVTGGSDGSRLYD
 CVWRYNSSVNEAEVAPMLKAREYHSSVLDGLLYVVAADSTERYDHTTDSWEALQPMTPMDNCSTTAC
 RGRLYAIGSLAGKETMVMQCYDPDIDLWSLVDCGQLPPWSFAPKTATLNLGMYFVRDDSAEVDVYNPTRN
 EWDKIPSMNQVHVGGSLAVLGGKLYVSGGYDNTFELSDVVEAYDPETRAWSVVGRLPEPTFWHGSVSIFR
 QFMPQTFSGGRGFELDSGSDMDPGRPRPRPDELH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM 014851

ORF Size: 1791 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: NM_014851.2, NP_055666.2

RefSeq Size: 4502 bp

RefSeq ORF: 1794 bp

Locus ID: 9903

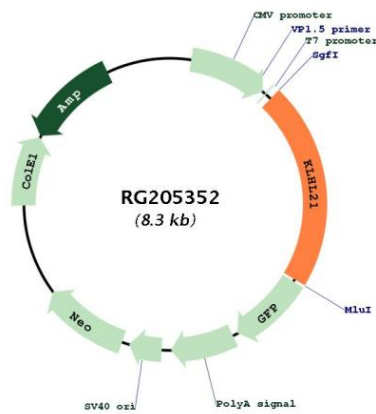
UniProt ID: [Q9UJP4](#)

Cytogenetics: 1p36.31

Domains: BTB, Kelch

Gene Summary: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex required for efficient chromosome alignment and cytokinesis. The BCR(KLHL21) E3 ubiquitin ligase complex regulates localization of the chromosomal passenger complex (CPC) from chromosomes to the spindle midzone in anaphase and mediates the ubiquitination of AURKB. Ubiquitination of AURKB by BCR(KLHL21) E3 ubiquitin ligase complex may not lead to its degradation by the proteasome.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205352