

Product datasheet for **RC223003**

KLHL18 (NM_025010) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KLHL18 (NM_025010) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KLHL18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223003 representing NM_025010
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGGAGGACGGCGCGGAGGAGCTGGAGGATCTGGTGCACCTCTCCGTGTCTGAGTTGCCTAGTCGCG
 GCTACGGCGTCATGGAGGAGATCCGGCGCAGGGCAAGCTGTGCGACGTGACCCCAAGATTGGGGACCA
 CAAATTCAGTGCCACCGGATTGTCTTAGCAGCCTCGATCCCGTATTTCCATGCTATGTTTACAAATGAC
 ATGATGGAGTGCAAGCAGGATGAGATTGTAATGCAAGGAATGGACCCAAGTCCCTGGAGGCTCTGATCA
 ACTTTGCCTACAACGGCAACCTTGCCATTGACCAGCAAAATGTCCAGTCATTGCTGATGGGGGCGAGCTT
 CCTGCAGCTGCAGAGCATCAAAGACGCCTGCTGCACATTCCTCGAGAACGGCTTACCCAAAAAATGCTC
 CTGGGTGTGCGCCAGTTTGTGAGACAATGATGTGTGCTGTGCTGTACGACGCTGCCAACAGCTTATCC
 ACCAGCACTTTGTGGAGGTGCCATGTCAGAAGAGTTCCTGGCCCTGCCCTTGAAGACGTGCTTGAGCT
 GGTGTCTCGGGATGAGCTGAATGTCAAATCTGAGGAGCAGGTCTTGAAGCTGCATTGGCCTGGGTGAGA
 TACGACCGGGAGCAGAGGGGTCCCTACCTGCCTGAGCTGCTGTCCAATATCCGCCTGCCCTCTGTGCGC
 CCCAGTTCCTTTAGACAGAGTACAGCAGGATGACCTGGTGCCTGCTGCCACAAATGCAGGGACCTGGT
 AGACGAAGCAAAGGACTACCACCTCATGCCAGAGCGCCGCCACCTGCCAGCTTTCAGAACCCGGCCA
 CGCTGCTGCACATCCATCGCTGGACTTATCTACGCTGTAGGGGGCCTCAACTCAGCAGGTGATCCCTGA
 ATGTGGTGAAGTGTTCGACCCATTGCCAATTGCTGGGAGAGATGCCGTCCCATGACAACAGCCCGCAG
 CCGCGTTGGCGTGGCTGTGGTGAACGGGCTTCTCTATGCCATCGGAGGATATGACGGCCAGCTACGGCTG
 AGCACTGTGGAGGCTACAACCCGGAGACAGACACATGGACCAGAGTGGGAGCATGAATAGCAAGAGAA
 GTGCCATGGGACAGTCTGCTGGATGGCAGATCTACGCTGTGGGGGCTACGATGGCAACTCTCCCT
 CAGCTCCGTGGAGACCTACTCACCTGAGACGGACAATGGACAGTGGTACCTCGATGAGCTCGAATCGC
 AGTGTCTGGGGTTACAGTCTTTGAGGGCAGGATATATGTGTCAGGCGGCCATGATGGTTTGCAGATCT
 TCAGCAGTGTGGAACACTACAACCACACAGCCACCTGGCACCTGCAGCTGGCATGCTCAACAAGCG
 CTGCCGGCAGGAGCCGCTCCCTGGGGAGCAAGATGTTTGTCTGCGGGGCTACGATGGCTCTGGCTTC
 CTCAGCATTGCCGAGATGTACAGCTCTGTGGCAGACCAGTGGTGCCTGATTGTCCCATGCACACGCGCA
 GGAGCCGGGTCTCCCTGGTGGCCAGCTGTGGCGCCTCTACGCTGTTGGGGGCTACGACGGACAGTCAA
 CCTAAGCTCAGTGGAGATGTATGACCCAGAGACAGACTGCTGGACATTCATGGCCCCATGGCGTGCCAT
 GAGGGAGGGTTCGGTGTGGGCTGCATCCCTCTCCTCACCATC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223003 representing NM_025010
 Red=Cloning site Green=Tags(s)

MVEDGAEELDLVHFSVSELPSRGYGMEEIRRQKGLCDVTLKIGDHKFSAHRIVLAASIPYFHAMFTND
 MMECKQDEIVMQMDPSALEALINFAYNGNLAIDQQNVQSLLMGASFLQLQSIKDACCFTLRERLHPKNC
 LGVRQFAETMMCAVL YDAANSF IHQHFVEVSMSEFLALPLEDVLLEL VSRDELNVKSEEQVFEALAWVR
 YDREQRGPYLPPELLSNIRLPLCRPQFLSDRVQQDDLVRCCCHKRDLVDEAKDYHLMPEPERRPLPAFRTRP
 RCCTSIAGLIYAVGGLNSAGDSLNVVEVDFPIANCWERCPRMTTARSRVGVAVVNGLLYAIIGGYDGLRL
 STVEAYNPETDTWTRVGSMSKRSAMGTVVLDGQIYVCGGYDGNSSLSSVETYSPEKWTVVTSMSNR
 SAAGVTVFEGRIYVSGGHDGLQIFSSVEHYNHHTATWHPAAGMLNKRRCRGAASLGSKMFVCGGYDGSF
 LSIAEMYSSVADQWCLIVPMHTRRSRVSLVASCGRLYAVGGYDQSNLSSVEMYDPETDCWTFMAMPACH
 EGGVGVGCIPLTTI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8046_d09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_025010

ORF Size: 1722 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_025010.5](#)

RefSeq Size: 4660 bp

RefSeq ORF: 1725 bp

Locus ID: 23276

UniProt ID: [O94889](#)

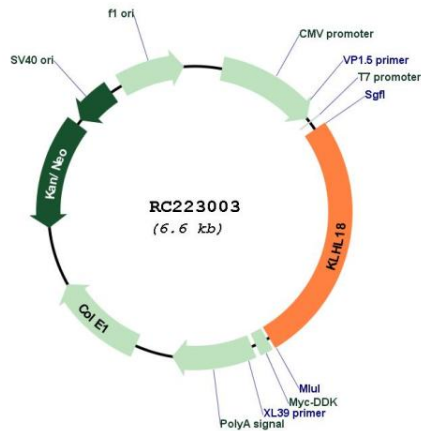
Cytogenetics: 3p21.31

Domains: Kelch

MW: 63.5 kDa

Gene Summary: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex required for mitotic progression and cytokinesis (PubMed:23213400). The BCR(KLHL18) E3 ubiquitin ligase complex mediates the ubiquitination of AURKA leading to its activation at the centrosome which is required for initiating mitotic entry (PubMed:23213400). Regulates light- and dark-dependent alpha-transducin localization changes in rod photoreceptors through UNC119 ubiquitination and degradation (By similarity). Preferentially ubiquitinates the unphosphorylated form of UNC119 over the phosphorylated form (By similarity). In the presence of UNC119, under dark-adapted conditions alpha-transducin mislocalizes from the outer segment to the inner part of rod photoreceptors which leads to decreased photoreceptor damage caused by light (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC223003