

## Product datasheet for **RC228934**

### **KLHL2 (NM\_001161522) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KLHL2 (NM_001161522) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KLHL2
Synonyms:	ABP-KELCH; MAV; MAYVEN
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC228934 representing NM\_001161522  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGTGAGAGCCGAGCAAAAGAGAGTTAGAATAAAAGAGGTAGATGGCTGGACCCTGAGGATGCTAATTG  
 ATTATGTTTACACTGCAGAAATTCAGGTTACAGAAGAAAATGTACAGGTAATTCTCCAGCAGCTGGTCT  
 CTTACAGTTACAGGATGTGAAGAAGACTTGTGTGAATTTTGGAAATCCAGCTTACCCTGTCAACTGC  
 TTAGGAATCCGGGCTTTTGTGATATGCATGCATGTACCGACCTTCTGAACAAGGCCAACACCTATGCAG  
 AGCAACATTTTGCAGATGTTGACTTAGTGAAGAAATTTCTCAATCTTGGCATCGAACAAGTGTGCAGCTT  
 AATCTCAAGTGACAACTTACCATTTCTCAGAAGAGAAGGTATTTGAAGCAGTAATAGCATGGGTGAAC  
 CATGACAAGGATGTGAGGCAAGAGTTTATGGCCCGACTGATGGAACATGTACGGTTACCTTTGCTTCCTC  
 GGGAAATTTAGTTCAGAGGGTTGAAGAGGAAGCATTGGTCAAGAATAGCAGTGTGCAAAGATTACCT  
 CATTGAAGCAATGAAGTACCATTTGCTGCCAACAGAGCAGCGTATATTAATGAAGAGTGTCCGGACCCGG  
 CTGAGGACACCCATGAACCTTCCCAAATGATGGTGGTGGTTGGGGCCAAGCACCAAAGGCTATCCGGA  
 GTGTGGAATGCTATGACTTTAAAGAAGAAAGGTGGCACCAGTAGCAGAGTTGCCTTCCAGGAGGTGCAG  
 GGCAGGCATGGTCTACATGGCTGGACTTGTTTTGTGTTGGTGGCTTAAATGGCTCATTAAAGAGTTCGC  
 ACTGTAGATTCCTACGACCCTGTGAAGGACCAGTGGACCAGCGTTGCTAACATGAGAGACCCGAGAAGCA  
 CTTTGGGAGCTGCTGTGTTAAATGGATTATTACGCTGTGGGAGGCTTTGATGGGAGTACAGGTTTGTG  
 ATCTGTGGAAGCATAACAATAAAGTCTAATGAGTGGTTTCATGTAGCTCCCATGAATAACAAGGAGGAGC  
 AGTGTGGTGTGGGTGTTGTTGGAGTTTGTCTATGCTGTAGGAGGTTATGATGGAGCATCACGTCAGT  
 GTCTTAGCACAGTAGAATGCTATAATGTACAACAAATGAGTGGACCTATATAGCAGAAAATGAGCACCAG  
 CGGAGTGGAGCAGGTGTTGGTGTGTTAAACAATTTATTGTATGCTGTAGGAGGTCATGATGGCCCTTTA  
 GTACGAAAAAGTGTGAAGTATATGATCCACCCTAACGCATGGAGACAGGTTGCAGATATGAACATGT  
 GCAGAAGAAATGCAGGAGTTTGTGCAGTTAATGGTCTGTTATATGTTGTTGGAGGGGATGATGGTTCCTG  
 TAACCTGGCGTCAGTAGAATATTATAACCCAACAACCGATAAATGGACAGTTGTGTATCGTGTATGAGC  
 ACAGGGAGAAGTTATGCAGGGGTCACAGTTATTGATAAACCATTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228934 representing NM\_001161522  
 Red=Cloning site Green=Tags(s)

MESRAKRVRIKEVDGWLRLIDYVYTAETIQVTEENVQVLLPAAGLLQLQDVKKTCCEFLESQHPVNC  
 LGIRAFADMHACTDLLNKANTYAEQHFADVVLSEEFNLNGIEQVCSLISSDKLTISSEKVFVAVIAWVN  
 HDKDVQRQEFMARLMEHVRLPLLPREYLQQRVEEALVKNSSACKDYLIEAMKYHLLPTEQRILMKSVRTR  
 LRTPMNLPKLMVVVGGQAPKAIRSVYDFKEERWHQVAELPSRRCRAGMVYAGLVFAVGGFNGSLRVR  
 TVDSYDPVKDQWTSVANMRDRRSTLGAAVLNGLLYAVGGFDGSTGLSSVEAYNIKSNEWFHVAPMNTRRS  
 SVGVGVVGGLLYAVGGYDGAQRCLSTVECYNATTNEWYIAEMSTRRSGAGVGLNLLYAVGGHDGPL  
 VRKSVEVYDPTTNAWRQVADMNMCRRNAGVCAVNGLLYVVGDDGSCNLSVEEYNPPTDKWTVVSSCMS  
 TGRSYAGVTIDKPL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

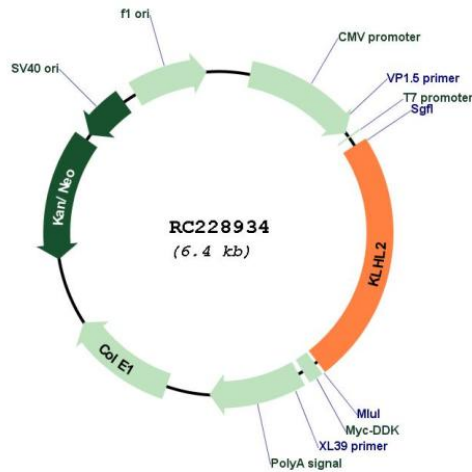
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001161522

**ORF Size:** 1515 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\\_001161522.1](#), [NP\\_001154994.1](#)

**RefSeq Size:** 2907 bp

**RefSeq ORF:** 1518 bp

**Locus ID:** 11275

**UniProt ID:** [O95198](#)

**Cytogenetics:** 4q32.3

**MW:** 56.1 kDa

**Gene Summary:** Component of a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex that mediates the ubiquitination of target proteins, such as NPTXR, leading most often to their proteasomal degradation (By similarity). Responsible for degradative ubiquitination of the WNK kinases WNK1, WNK3 and WNK4. Plays a role in the reorganization of the actin cytoskeleton. Promotes growth of cell projections in oligodendrocyte precursors. [UniProtKB/Swiss-Prot Function]