

## Product datasheet for **RG205347**

### **KLHL2 (NM\_007246) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KLHL2 (NM_007246) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KLHL2
Synonyms:	ABP-KELCH; MAV; MAYVEN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG205347 representing NM\_007246  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGACGCCGCCGCTGCCTCCCGCATGCACAAAGCAGGGTCATCAGAAGCCTCTCGATTCAAAGATG  
 ATAATACCGAAAAACACTGCCAGTGACAGTGAATCCTTGGCATATGAAGAAAGCTTCAAAGTCATGAA  
 CGAATTAAGAAGTCAAAATTTGCTGTGCGATGTACAATTGTGGCAGAAGACATGAAAATTTCTGCTCAT  
 AGAGTGGTGTGGCCGCTGTAGTCTTATTTTCATGCCATGTTTACAGGTGAGATGAGTGAGAGCCGAG  
 CAAAGAGAGTTAGAATAAAAGAGGTAGATGGCTGGACCTGAGGATGCTAATTGATTATGTTTACACTGC  
 AGAAATTCAGGTTACAGAAGAAATGTACAGGTACTTCTCCAGCAGCTGGTCTTTACAGTTACAGGAT  
 GTGAAGAAGACTTGTGTGAATTTTGAATCCAGCTTACCCTGTCACTGCTTAGGAATCCGGGCTT  
 TTGCTGATATGCATGCATGTACTGACCTTCTGAACAAGGCCAACACCTATGCAGAGCAACATTTTGCAGA  
 TGTTGTACTTAGTGAAGAATTTCTCAATCTTGGCATCGAACAAGTGTGCAGCTTAATCTCAAGTGACAAA  
 CTTACCATTTCTCAGAAGAGAAGGTATTTGAAGCAGTAATAGCATGGGTGAACCATGACAAGGATGTGA  
 GGCAAGAGTTTATGGCCGACTGATGGAACATGTACGGTTACCTTTGCTTCTCGGGAATATTTAGTTCA  
 GAGGGTTGAAGAGGAAGCATTGGTCAAGAATAGCAGTGCTTGCAAAGATTACCTCATTGAAGCAATGAAG  
 TACCATTTGCTGCCAACAGAGCAGCGTATATTAATGAAGAGTGTCCGGACCCGGCTGAGGACACCCATGA  
 ACCTTCCCAAATGATGGTGGTGGTGGGGCCAAAGCACCAGGCTATCCGGAGTGTGGAATGCTATGA  
 CTTTAAAGAAGAAAGGTGGCACCAGTGCAGAGTTGCCCTCCAGGAGGTGCAGGGCAGGCATGGTCTAC  
 ATGGCTGGACTTGTGTTTGTGCTGTTGGTGGCTTAAATGGCTCATTAAGAGTTCGCACTGTAGATTCCTACG  
 CTTTAAATGGATTATTATACGCTGTGGGAGGCTTTGATGGGAGTACAGTTTGTCTGTGGAAGCATA  
 AACATAAAGTCTAATGAGTGGTTTCATGTAGTCCCATGAATACAAGGAGGAGCAGTGTGGTGTGGGTG  
 TTGTTGGAGGTTTGTCTATGCTGTAGGAGTTATGATGTAGCATCACGTCAGTGTCTTAGCACAGTAGA  
 ATGCTATAATGCTACAACAAATGAGTGGACCTATATAGCAGAAATGAGCACCAGGCGGAGTGGAGCAGGT  
 GTTGGTGTGTTAAACAATTTATTGTATGCTGTAGGAGTGCATGATGGCCCTTAGTACGAAAAAGTGTG  
 AAGTATATGATCCCACCACTAACGCATGGAGACAGTTGCAGATATGAACATGTGCAGAAGAAATGCAGG  
 AGTTTGTGCAGTAAATGGTCTGTATATGTTGTTGGAGGGATGATGGTTCCTGTAACCTGGCGTCAGTA  
 GAATATTATAACCAACAACCGATAAATGGACAGTTGTGTCATCGTGTATGAGCACAGGGAGAAGTTATG  
 CAGGGGTACAGTTATTGATAAACGATTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG205347 representing NM\_007246  
 Red=Cloning site Green=Tags(s)

METPPLPACTKQGHQKPLDSKDDNTEKHCPVTVPNWHMKAFAKVMNELRSQNLCDVTIVAEDMEISAH  
 RVVLAACSPYFHAMFTGEMSESRAKRVRIKEVDGWTLRMLIDYVYTAIEIQVTEENVQVLLPAAGLLQLQD  
 VKKTCCEFLSQLHPVNCLGIRAFADMHACTDLLNKANTYAEQHFADVLSSEFLNLGIEQVCSLSSDK  
 LTISSEEVFEAVIAWVNHDKDVRQEFMARLMEHVRLPLLPREYLVQRVEEEALVKNSSACKDYLIEAMK  
 YHLLPTEQRILMKSVRTRLRTPMNLPKLMVVVGGQAPKAIRSVCEYDFKEERWHQVAELPSRRCRAGMVY  
 MAGLVFAVGGFNGSLRVRTVDSYDPVKDQWTSVANMRDRRSTLGAAVLNGLLYAVGGFDGSTGLSSVEAY  
 NIKSNEWFHVAPMNTRRSSVGVVGGLLYAVGGYDVASRQCLSTVECYNATTNEWTYIAEMSTRRSAG  
 VGLNLLYAVGGHDGPLYRKSVEVYDPTTNAWRQVADMNMCRRNAGVCAVNGLLYVVGDDGSCNLASV  
 EYYPNTDKWTVVSSCMSTGRSYAGVTVIDKRL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_007246

**ORF Size:** 1779 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\\_007246.2](#), [NP\\_009177.2](#)

**RefSeq Size:** 3159 bp

**RefSeq ORF:** 1782 bp

**Locus ID:** 11275

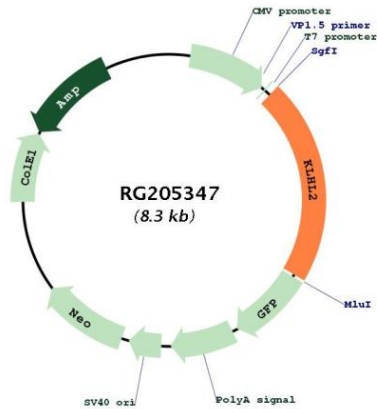
**UniProt ID:** [O95198](#)

**Cytogenetics:** 4q32.3

**Domains:** BTB, Kelch

**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]

**Product images:**



Circular map for RG205347