

## Product datasheet for **RG232883**

### **KLHL3 (NM\_001257195) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KLHL3 (NM_001257195) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KLHL3
Synonyms:	PHA2D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG232883 representing NM\_001257195  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCCTGAGAGTAAAGCCAAAAAGATAGAAATCAAGGACGTGGATGGGCAGACGCTGAGTAAAGCTGATTG  
 ACTACATCTATACTGCTGAAATCGAGGTGACTGAAGAGAATGTCCAGGTGCTGCTCCCGCAGCCAGCTT  
 GCTGCAGCTCATGGATGTTTCGGCAGAAGTCTGTGACTTCTGTCAGTCTCAGTTGCATCCACCAATTGC  
 CTGGGCATCCGTGCATTTGCAGATGTACACACCTGCACTGACCTTCTGCAGCAGGCCAATGCCTACGCAG  
 AGCAGCACTTTCCAGAGGTGATGCTAGGAGAAGAAATTTCTTAGCCTGAGTCTGGACCAGGTGTGCAGCTT  
 GATATCCAGCGACAAGCTGACCGTTTCTCAGAAGAGAAGGTGTTTGAAGCTGTGATCTCATGGATCAAT  
 TATGAGAAAGAAACCCGTTTAGAGCACATGGCAAAGCTGATGGAACATGTCGACTTCTCTCTTACCTA  
 GGGACTACCTAGTCCAAACGGTTGAAGAAGAAGCTTTGATAAAGAATAACAACACCTGTAAGACTTCTCT  
 CATTGAGGCCATGAAATACCATCTCTCCCTCTGGATCAGAGACTATTGATTAAGAACCCAAGGACCAAG  
 CCCAGGACTCCAGTCAGCTTCCCAAGGTCATGATTGTGGTTGGCGGCCAGGCACCCAAGGCAATCCGCA  
 GTGTGGAGTGCTATGATTTTCGAGGAGGACCGGTGGGATCAGATTGCTGAGCTTCTTCCAGAAGATGCAG  
 AGCAGGTGTGGTGTTCATGGCTGGCCACGTGTATGCCGTGGGAGGGTTAATGGCTCACTGCGGGTGCAG  
 ACAGTGGATGTGTATGACGGCGTGAAGGACCAAGTGGACGTCCATTGCCAGCATGCAGGAGCGCCGGAGCA  
 CACTGGGCGCAGCGGTGCTCAATGACTTGTCTACGCAGTGGGAGGCTTTGATGGCAGTACTGGCCTAGC  
 ATCGGTGGAAGCCTACAGCTACAAGACCAACGAGTGGTCTTTGTGGCCCGATGAACACGCGCGGAGC  
 AGTGTGGGTGTGGCGTGTGGAGGGGAAGCTATATGCTGTTGGGGTTATGATGGAGCTTCCCGCCAGT  
 GTCTGAGCACTGTGGAGCAGTACAACCCAGCAGCAATGAATGGATATACGTGGCGGACATGAGCACCCG  
 CCGCAGTGGCGCAGGGGTTGGAGTGCTTAGCGGACAGCTGTACGCCACAGGTGGGCATGATGGGCCTTGT  
 GTGAGGAAGAGCGTTGAGGTTTACGATCCTGGAACAAATACCTGGAAGCAAGTGGCAGACATGAACATGT  
 GCCGGCGCAACGCAGGGGTCTGTGCAGTAAATGGGCTCCTGTATGTGGTTGGAGGGGATGATGGATCCTG  
 CAACTTGGCTTCGGTGGAGTACTACAATCCTGTCACTGACAAATGGACGCTGTTCCAACGAACATGAGC  
 ACGGGCGGAGCTATGCAGGTGTGCCGTGATTCACAAGTCTTG

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>RG232883 representing NM\_001257195  
 Red=Cloning site Green=Tags(s)

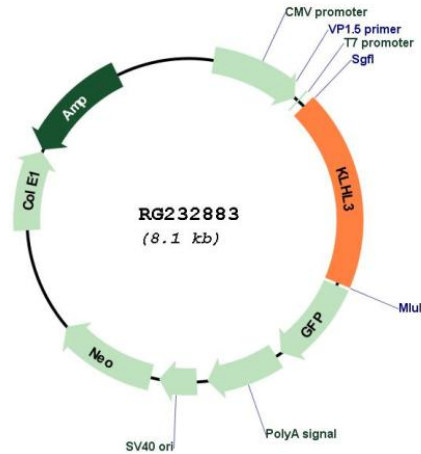
MSESKAKKIEIKDQVDTLSKLDYIYTAIEIVTEENVQVLLPAASLLQLMDVRQNCDFLQSQLHPTNC  
 LGIRAFADVHTCTDLLQANAYAEQHFPEVMLGEEFLSLSLDQVCSLISSDKLTVSSEEKVFVFAVISWIN  
 YEKETRLEHMAKLEMEHVRLPLPRDYLVQTVVEEALIKNNNTCKDFLIEAMKYHLLPLDQRLLIKPNRTRK  
 PRTPVSLPKVMIIVGGQAPKAIRSVCEYDFEEDRWQIAELPSRRCRAGVVMAGHVYAVGGFNGSLRVR  
 TVDVYDGVKQWTSIASMQERRSTLGAAVLNDLLYAVGGFDGSTGLASVEAYSYKTNEWFFVAPMNRTRS  
 SVGVGVVEGKLYAVGGYDGASRQCLSTVEQYNPATNEWIYVADMSTRRSAGVGVLSGQLYATGGHDGPL  
 VRKSVEVYDPGNTWKQVADMMNCRNAGVCAVNGLLYVVGDDGSCNLSVEYYNPVTDKWTLLPTNMS  
 TGRSYAGVAVIHKSL

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

Sgfl-MluI



**Plasmid Map:**


**ACCN:** NM\_001257195

**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\\_001257195.1](#), [NP\\_001244124.1](#)

**RefSeq Size:** 6557 bp

**RefSeq ORF:** 1518 bp

**Locus ID:** 26249

**UniProt ID:** [Q9UH77](#)

**Cytogenetics:** 5q31.2

**Gene Summary:** This gene is ubiquitously expressed and encodes a full-length protein which has an N-terminal BTB domain followed by a BACK domain and six kelch-like repeats in the C-terminus. These kelch-like repeats promote substrate ubiquitination of bound proteins via interaction of the BTB domain with the CUL3 (cullin 3) component of a cullin-RING E3 ubiquitin ligase (CRL) complex. Mutations in this gene cause pseudohypoaldosteronism type IID (PHA2D); a rare Mendelian syndrome featuring hypertension, hyperkalemia and metabolic acidosis. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Mar 2012]