

## Product datasheet for **RC218393**

### KLHL3 (NM\_017415) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KLHL3 (NM_017415) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KLHL3
Synonyms:	PHA2D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC218393 representing NM\_017415  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGGGTGAAAGTGTCAAGCTGAGCTCCAGACTCTGATACAGGCTGGGGATGATGAGAAGAACCAGA  
 GGACGATCACTGTCAACCTGCCACATGGGAAAGCATTCAAGTTATGAATGAACTGCGGAGTAAACA  
 GCTGTTGTGTGACGTGATGATTGTGGCAGAAGATGTCGAGATAGAAGCCACCGTGTGGTCTGGCAGCC  
 TGCAGCCCTACTTCTGTGCGATGTTACAGGTGACATGTCTGAGAGTAAAGCCAAAAAGATAGAAATCA  
 AGGACGTGGATGGCAGACGCTGAGTAAGCTGATTGACTACATCTATACTGCTGAAATCGAGGTGACTGA  
 AGAGAATGTCCAGGTGCTGCTCCCGCAGCCAGCTTGTCTGACGCTCATGGATGTTCCGGCAGAAGTCTGT  
 GACTTCTGCAGTCTCAGTTGCATCCCACCAATTGCCTGGGCATCCGTGCATTTGCAGATGTACACACCT  
 GCACTGACCTTCTGCAGCAGGCCAATGCCTACGCAGAGCAGCACTTTCCAGAGGTGATGCTAGGAGAAGA  
 ATTTCTTAGCCTGAGTCTGGACCAGGTGTGACGCTTGATATCCAGCGACAAGCTGACCGTTTCTTCAGAA  
 GAGAAGGTGTTGAAGCTGTGATCTCATGGATCAATTATGAGAAAAGAAACCCGTTTAGAGACATGGCAA  
 AGCTGATGGAACATGTCCGACTTCTCTCTTACCTAGGGACTACCTAGTCCAAACGGTTGAAGAAGAAGC  
 TTTGATAAAGAATAACAACACCTGTAAAGACTTCTCATTGAGGCCATGAAATACCATCTCTCCCTCTG  
 GATCAGAGACTATTGATTAAGAACCCAAGGACCAAGCCAGGACTCCAGTCAGCCTTCCCAAGGTATGAT  
 TTGTGGTTGGCGCCAGGCACCAAGGCAATCCGCAGTGTGGAGTGTATGATTTTCGAGGAGGACCGGTG  
 GGATCAGATTGCTGAGCTTCTTCCAGAAGATGCAGAGCAGGTGTGGTGTTCATGGCTGGCCACGTGAT  
 GCCGTGGGAGGGTTTAAATGGCTCACTGCGGTGCGGACAGTGGATGTGTATGACGGCGTGAAGGACCAT  
 GGAGCTCCATTGCCAGCATGCAGGAGCGCCGAGCACACTGGGCGCAGCGGTGCTCAATGACTTGTCTTA  
 CGCAGTGGGAGGCTTGTATGGCAGTACTGCCTAGCATCGGTGGAAGCCTACAGCTACAAGACCAACGAG  
 TGGTTCTTTGTGGCCCGATGAACACGCGCGGAGCAGTGTGGTGTGGCGTGTGGAGGGGAAGCTAT  
 ATGCTGTTGGGGTTATGATGGAGCTTCCCGCCAGTGTCTGAGCACTGTGGAGCAGTACAACCCAGCGAC  
 CAATGAATGGATATACGTGGCGGACATGAGCACCCCGCAGTGGCGCAGGGGTTGGAGTGTCTAGCGGA  
 CAGCTGTACGCCACAGGTGGCATGATGGGCTTTGGTGAAGAGCGTTGAGGTTTACGATCTGGAA  
 CAAATACCTGGAAGCAAGTGGCAGACATGAACATGTGCCGGCGCAACGCAGGGTCTGTGCAGTAAATGG  
 GCTCTGTATGTGTTGGAGGGGATGATGGATCCTGCAACTTGGCTTCGGTGGAGTACTACAATCCTGTC  
 ACTGACAATGGACGCTGCTTCCAACGAACATGAGCACGGGGCGGAGCTATGCAGGTGTTGCCGTGATTC  
 ACAAGTCTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC218393 representing NM\_017415  
 Red=Cloning site Green=Tags(s)

MEGESVKLSSQTLIQAGDDEKNQRTITVNPAMHGKAFKVMNELRSKQLLCDVMIVAEDVEIEAHRVVLAA  
 CSPYFCAMFTGDMSESKAKKIEIKDVGQTL SKLIDYIYTAIEIVTEENVQVLLPAASLLQLMDVRQNC  
 DFLQSQLHPTNCLGIRAFADVHTCTDLLQQANAYAEQHFPEVMLGEEFLSLSLDQVCSLISDDKLTVSSE  
 EKVF EAVISWINYEKETRLEHMAKLMHVRLPLLPRDYL VQTV EEEALIKNNNTCKDFLIEAMKYHLLPL  
 DQRLLIKNPRTKPRTPVSLPKVMI VVGQAPKAIRSV ECVDFEEDRWQIAELPSRRCRAGVVF MAGHVY  
 AVGGFNGSLRVRTVDVYDGVKDQWTSIASMQERRSTLGA AVLNDLLYAVGGFDGSTGLASVEAYS YKTNE  
 WFFVAPMNTRRSSVGVVVEGKLYAVGGYDGASRQCLSTVEQYNPATNEWIYVADMSTRRSAGVGVLSG  
 QLYATGGHDGPLVRKSVEVYDPGTNTWKQVADMMNCRNAGVCAVNGLLYVVGDDGSCNLSAVEYYNPV  
 TDKWTL LPTNMSTGRSYAGVAVIHKS L

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6475\\_g02.zip](https://cdn.origene.com/chromatograms/mk6475_g02.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_017415

ORF Size: 1761 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 0.22um filter is required.

RefSeq: [NM\\_017415.3](#)

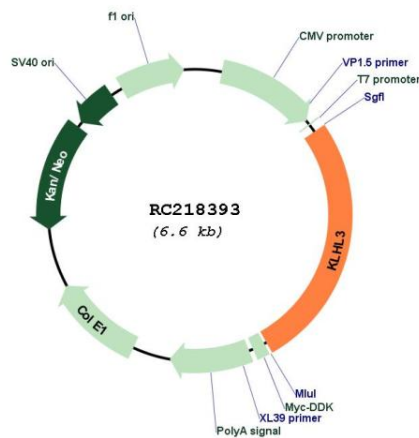
RefSeq Size: 6485 bp

RefSeq ORF: 1764 bp

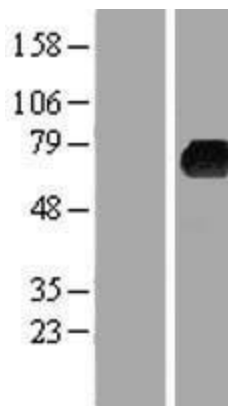
**Locus ID:** 26249  
**UniProt ID:** [Q9UH77](#)  
**Cytogenetics:** 5q31.2  
**Domains:** BTB, Kelch  
**MW:** 64.8 kDa

**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 pseudohypaldosteronism type IID (PHA2D); a rare Mendelian syndrome featuring hypertension, hyperkalaemia and metabolic acidosis. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Mar 2012]

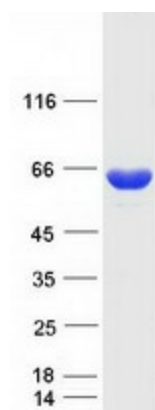
### Product images:



Circular map for RC218393



Western blot validation of overexpression lysate (Cat# [LY413773]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218393 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KLHL3 protein (Cat# [TP318393]). The protein was produced from HEK293T cells transfected with KLHL3 cDNA clone (Cat# RC218393) using MegaTran 2.0 (Cat# [TT210002]).