OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC112494

KLHL25 (NM_022480) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KLHL25 (NM_022480) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLHL25
Synonyms:	ENC-2; ENC2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC112494 sequence for NM_022480 edited (data generated by NextGen Sequencing)

ATGTCGGTCAGTGTCCATGAGACCCGCAAGTCGCGGAGCAGCACGGGGTCCATGAACGTC
ACCCTCTTCCACAAGGCCTCCCACCCGGACTGTGTGCTGGCCCACCTCAACACGCTTCGC
AAGCACTGCATGTTCACCGACGTCACACTCTGGGCGGGCGACCGTGCCTTCCCCTGTCAC
CGTGCCGTGCTGGCCGCCTCTAGCCGCTATTTTGAGGCCATGTTCAGCCATGGCCTTCGG
GAGAGCCGGGATGACACTGTCAACTTCCAGGACAACCTGCACCCGGAGGTGCTGGAGCTG
CTGCTGGACTTTGCCTACTCCTCACGCATCGCCATCAACGAGGAGAACGCTGAGTCACTG
CTGGAGGCAGGCGACATGCTGCAGTTCCACGATGTGCGGGATGCTGCCGCCGAGTTCCTG
GAGAAGAACCTTTTCCCCTCCAACTGCCTGGGCATGATGCTGCTCTCGGACGCCCACCAG
TGCCGCCGGCTGTATGAGTTCTCCTGGCGCATGTGCCTGGTGCACTTTGAGACGGTGAGG
CAGAGCGAGGACTTCAACAGCCTGTCCAAGGACACACTGCTGGACCTCATCTCGAGTGAT
GAGCTGGAGACCGAGGACGAGCGGGTGGTCTTCGAGGCCATCCTCCAGTGGGTGAAGCAC
GACCTGGAGCCACGGAAGGTCCACTTGCCCGAGCTCCTCCGCAGCGTGCGTCTGGCCTTG
CTGCCGTCCGACTGCCTGCAGGAGGCCGTCTCCAGCGAGGCCCTCCTCATGGCAGACGAG
CGCACCAAGCTTATCATGGATGAGGCCCTGCGCTGCAAGACCAGGATCCTGCAGAATGAT
GGCGTGGTCACCAGCCCCTGTGCCTGGCCACGCAAGGCGGGCCACACGCTACTCATCCTG
GGGGGCCAGACCTTCATGTGTGACAAGATCTACCAGGTGGACCACAAGGCCAAGGAGATC
ATCCCCAAGGCCGACCTGCCCAGCCCCCGGAAGGAGTTCAGCGCCTCAGCGATCGGCTGC
AAGGTCTATGTGACGGGGGGCAGGGGCTCCGAGAACGGGGTCTCCAAGGATGTCTGGGTG
TACGACACCGTACATGAGGAATGGTCCAAGGCGGCGCCCATGCTGATTGCCCGCTTTGGC
CATGGCTCAGCTGAGCTGGAGAACTGCCTCTATGTGGTGGGGGGACACACATCCCTGGCA
GGGGTCTTCCCGGCCTCGCCTTCTGTCTCCCTGAAACAAGTGGAGAAATACGACCCTGGG
GCCAACAAGTGGATGATGGTGGCCCCCTTGCGGGATGGCGTCAGCAATGCCGCAGTGGTG
AGTGCCAAGCTGAAGCTCTTTGTTTTCGGAGGAACCAGCATCCACCGGGACATGGTGTCC
AAGGTCCAGTGCTATGACCCCTCGGAGAACAGGTGGACGATCAAGGCCGAGTGCCCCCAG
CCTTGGCGGTACACAGCCGCTGCCGTCCTGGGCAGCCAGATCTTCATCATGGGAGGTGAC
ACGGAATTCACAGCCGCCTCGGCCTACCGCTTTGACTGTGAGACCAACCAGTGGACGCGG
ATTGGGGACATGACTGCCAAGCGCATGTCCTGCCATGCCCTGGCTTCCGGCAACAAGCTC
TATGTGGTCGGGGGCTACTTTGGGACCCAGAGGTGTAAGACTCTGGACTGCTATGACCCC
ACTTCAGATACATGGAACTGCATCACCACAGTGCCCTACTCACTTATCCCCACGGCCTTT
GTCAGCACCTGGAAGCACCTGCCCGCGTGA

Clone variation with respect to NM_022480.3
865 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_022480 unedited
GCGAATTTTGTNATACGACTCACTATAGGGGCGGCCGCGAATTCGCACGAGGGCGTTTTT
GCCTGTGGAGAGCCGGCCGACGGGAGCCGCGGCGGAGCCTGTTGAGCTCGCGCGGGCTGC
CGGGAGTGGTCTCTGAGGCGGCGGCGGCGGCGGGGATCGTCTCCGGCACTGGCGCACCAT
GTCGGTCAGTGTCCATGAGACCCGCAAGTCGCGGAGCAGCACGGGGTCCATGAACGTCAC
CCTCTTCCACAAGGCCTCCCACCCGGACTGTGTGCTGGCCCACCTCAACACGCTTCGCAA
GCACTGCATGTTCACCGACGTCACACTCTGGGCGGGCGACCGTGCCTTCCCCTGTCACCG
TGCCGTGCTGGCCGCCTCTAGCCGCTATTTTGAGGCCATGTTCAGCCATGGCCTTCGGGA
GAGCCGGGATGACACTGTCAACTTCCAGGACAACCTGCACCCGGAGGTGCTGGAGCTGCT
GCTGGACTTTGCCTACTCCTCACGCATCGCCATCAACGAGGAGAACGCTGAGTCACTGCT
GGAGGCAGGCGACATGCTGCAGTTCCACGATGTGCGGGATGCTGCCGCCGAGTTCCTGGA
GAAGAACCTTTTCCCCTCCAACTGCCTGGGCATGATGCTGCTCTCGGACGCCCACCAGTG
CCGCCGGCTGTATGAGTTCTCCTGGCGCATGTGCCTGGTGCACTTTGAGACGGTGAGGCA
GAGCGAGGACTTCAACAGCCTGTCCAAGGACACACTGCTGGACCTCATCTCGAGTGATGA
GCTGGAGACCGAGACGAGCGGGTGGTCTTCGAGGCCTCCTCCAGTGGGTGAAGCCGACCT
GGAGCCACCGGAGGTCCACTGCCCGAGCTCTCCGCAGCGTGCGTCTGGCCTTGCTGCCGT
NCGACTGCCCTGCAGGAGGGCGTCTCCAGCGAGGCCCTCCTCATGGCA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_022480 unedited
NTAAGCTTGGACCCGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTCTC
ACACTCTTTTTATTAAGTTAGAAAACTGATAAAAGCAACACAACTTTTGGGGAAAGCACC
ATGGCACGTCCTTTGTGCTATGTGATAAGCGTGCTTTATCTCAATGAAGCAACCCCACGG
GTCCAGGCACCCTCCCTGCAGTCCCCGCGGCCAGGCTCCTGAGTGTGCCAGCTGAGCCGT
CCCCTGGGACCACAGCCAAGTGCCTTCGGGCAGCTGGCCTGACACAGGCGGGGTCTGCTG
GGTCTACAGGGTCCAAGGAGCCCCATGCAGCCAGTGCCCCATGGCGGGCGCGTCAGTGGG
CAAACCCTGCCCAAAGGTCCCACCCCCAAGAGGCCTCCAGGACCCGCACCAAGGCATGGG
GGACACTCGCGGCTGCTTAAGTAACTGGTATGTGCACAGCCCCCTCCGCGGTCCTAACCT
TGAGTCAGGCCAGCAGTGGCTCCACTGCAGGCGCCTGGGTAGTCCCACCCTTGCACCCCC
TGATCACCTTCTGTCAAGATGCCACCCCCCCTCCCTTCCTCACGGCTGTCTCGACCTCTA
ATTTACAGGCTCTATCCCGCTTTTTCGTTTGCCGCATGCCTTCCCTCCCAGCCGTGAAGC
TGCTGTGTCTAGATCCTCCCCATTNATTTCTTTTCTCCTCTCTTTTTGGTTTGCTTCATT
CTGGTTTGCTATATGCCGCACCTCGGCATCACCGTCGGTCGTCCTCCCGCGCGCTCTCAC
GCCTGGCTTTACTTATTATCGTCTTCCGTCATCCTTTCGCTNGACTCTGTCTAGTCTTCC
TATCTCACTCCCGCTCCACGCGCCNCTCCACCATACGCCCGCTCCCTTACNTCCGCAGCT
CATCAGCCCGTGCTCCTCCATGACGCCACACCTACTCCCCTCTCGCACCGCCGCCGTGAC
GTACCTGCGCATTGTCCGCCCACATCCACACGCCCACCTCCCNCCTGNTCTTACATATGT
NTATCAGCGTACGGCGAGTCGCGGCACACCT

Restriction Sites: NotI-NotI

ACCN: NM_022480

Insert Size: 3600 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_022480.2, NP_071925.2
RefSeq Size:	3525 bp
RefSeq ORF:	1770 bp
Locus ID:	64410
UniProt ID:	Q9H0H3
Cytogenetics:	15q25.3
Domains:	BTB, Kelch
Gene Summary:	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex required for translational homeostasis. The BCR(KLHL25) ubiquitin ligase complex acts by mediating ubiquitination of hypophosphorylated EIF4EBP1 (4E-BP1): ubiquitination and subsequent degradation of hypophosphorylated EIF4EBP1 (4E-BP1) probably serves as a homeostatic mechanism to maintain translation and prevent eIF4E inhibition when eIF4E levels are low. The BCR(KLHL25) complex does not target EIF4EBP1 (4E-BP1) when it is hyperphosphorylated or associated with eIF4E.[UniProtKB/Swiss-Prot Function]