

Product datasheet for **MC218640**

Klhl12 (NM_153128) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klhl12 (NM_153128) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Klhl12
Synonyms:	C3ip1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC218640 representing NM_153128
Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCGGCATTATGGCCCTAAAGACATAATGACAAACACTCAGCTAAGTCCATCCTCAACTCCATGA
ACTCCCTCAGGAAGAGCAACACCCTCTGTGATGTGACCTTGAGAGTGGAGCAGAAAGACTCCCTGCGCA
TCGGATTGTGCTGGCCGCTGCAGTGATTATTTCTGTGCCATGTTCACTAGTGAGCTTTCAGAGAAGGGG
AAGCCGTATGTTGACATCAAGTTTAACTGCTGCTACCATGGAGATCCTGCTGGACTTCGTGTACACAG
AAACAGTACATGTGACAGTGGAGAATGTTCAAGAACTGCTCCCTGCAGCCTGTCTTCTCAGCTGAAAGG
TGTGAAACAAGCCTGCTGTGAGTCTTAGAAAAGTCAGCTGGATCCATCTAATTGCCTGGGTATCAGGGAT
TTTGCTGAAACTCACAATTGCGTTGACCTGATGCAAGCAGCTGAGGTGTTTAGCCAGAAGCATTTTCCTG
AAGTGGTGCAGCAGGAGGATTCATTCTCTGAGTCAAGGGGAGGTGGAGAAGCTAATCAAGTGCACGA
GATTCAGGTGGATTCTGAAGAGCCAGTCTTTGAGGCTGTTATCAACTGGGTGAAGCATGCCAAGAAGGAG
CGAGAAGAGTCTTACCTGACCTTTACAGTATGTTCCGATGCCCTGCTGACCCCCAGGTACATTACAG
ATGTAATTGATGCTGAGCCTTTCATCCGCTGTAGTTTACAATGCAGAGATCTAGTTGATGAAGCAAGAA
GTTTACCTGAGGCTGAACCTCGGAGTCAGATGCAAGGACCCAGAAACAAGGGCCCGCTAGGAGCCAAT
GAAGTGCTTCTGGTGGTTGGGGCTTCGGAAGCCAGCAGTCTCCTATTGATGTGGTAGAGAAGTATGACC
CCAAGACACAGGAGTGGAGCTTTTTACCAAGTATCACTCGCAAGAGACGGTATGTGGCCTCAGTTTCCTT
ACATGATCGGATCTATGTAATTGGTGGCTACGATGGCCGTTCCCGCTCAGTTCGGTGGAAATGTCTAGAC
TATACAGCAGACGAAGATGGAGTGTGGTACTCTGTGGCCCTATGAATGTGCGGCGAGGCCTTGCTGGAG
CCACCCTCTGGGAGATATGATTTACGCTCTGGAGGCTTTGATGGAAGTAGGCGTCATACAAGTATGGA
GCGGTATGACCCAAACATCGATCAGTGGAGTATGCTGGGAGATATGCAGACAGCTCGAGAGGGTGCAGGA
CTAGTAGTGGCCAGCGGAATAATCTATTGTCTAGGAGGATATGATGGCTTGAACATATTAATTCAGTTG
AGAAATATGATCCCCATACAGGACTGGACTAACGTTACGCCTATGGCCACCAAGCGTTCTGCTTATAA
CATTTCGACTGATTCCTGGACAACCTGTCACAAGTATGACCACGCCTCGATGCTATGTAGGGGCCACAGTG
CTTCGAGGGAGACTCTATGCAATTGCAGGATACGATGGGAATTCTCTGCTGAGCAGCATTGAGTGTATG
ACCCTATCATCGACAGCTGGGAAGTAGTGGCCTCCATGGGAACCCAGCGTTGTGATGCTGGTGTGTGTG
TCTCCGAGAAAAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1760_g11.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_153128

Insert Size: 1626 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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: [BC034514](#), [AAH34514](#)

RefSeq Size: 3211 bp

RefSeq ORF: 1626 bp

Locus ID: 240756

UniProt ID: [Q8BZM0](#)

Cytogenetics: 1 E4

Gene Summary:

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a negative regulator of Wnt signaling pathway and ER-Golgi transport. The BCR(KLHL12) complex is involved in ER-Golgi transport by regulating the size of COPII coats, thereby playing a key role in collagen export, which is required for embryonic stem (ES) cells division: BCR(KLHL12) acts by mediating monoubiquitination of SEC31 (SEC31A or SEC31B). The BCR(KLHL12) complex is also involved in neural crest specification: in response to cytosolic calcium increase, interacts with the heterodimer formed with PEF1 and PDCD6/ALG-2, leading to bridge together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export. As part of the BCR(KLHL12) complex, also acts as a negative regulator of the Wnt signaling pathway by mediating ubiquitination and subsequent proteolysis of DVL3. The BCR(KLHL12) complex also mediates polyubiquitination of DRD4 and PEF1, without leading to degradation of these proteins.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) uses an alternate in-frame splice junction in the 3' coding sequence compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1. Sequence Note:.