

Product datasheet for **MC220053**

KIhl3 (NM_001195075) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIhl3 (NM_001195075) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	KIhl3
Synonyms:	7530408C15Rik; AI430941; EG627648
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >MC220053 representing NM_001195075
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCTACTATATCATGATCCCATGCCAGGTTGGAAAGCGTGGCCATAGGCTCTGGACTTGGACGAGAG
 TTGCAGCACGGATCAACGTGGCCTTATGCTTCGTAGGAGGAGAAAAGTGCCTGGTTCTGCTAGTGTCCAG
 GCTGACCTCCGCATCAGGGGAAAAGGGTTTGAGTGTCAAGCCGAGCCCTCAGCCCACGGCGCAGGCTGAG
 GATGAAGAGAAGAACCGGAGGACTGTAACCGTCAACGCTGCCACATGGGGAAGGCCCTCAAGGTATGA
 ATGAGCTGCGAAGTAAGCGGCTGCTGTGTGACGTGATGATCGTGGCTGAAGACGTGGAAGTAGAAGCTCA
 CCGTGTGGTCTGGCAGCCTGCAGCCCTACTTCTGTGCAATGTTACAGGTGACATGTCTGAGAGCAAG
 GCCAAGAAGATCGAAATCAAGGACGTGGACGGACAGACTCTCAGCAAGCTCATCGACTACATCTACACCG
 CAGAGATCGAGGTGACAGAAGAGAACGTGCAGGTGCTGCTCCAGCAGCCAGCTTGTCTGCAGCTCATGGA
 TGTGCGACAGAAGTGTGATTTCTGCAGTCTCAGCTGCATCCACCAACTGCCTGGGCATCCGAGCT
 TTTGCAGATGTGCACACGTGCACCGACCTCTGCAGCAGGCGAACGCCTATGCAGAGCAGCACTCCAG
 AGGTGATGCTGGGGGAAGAGTTTCTGAGCTTAAGTCTGGACCAGGTGTGCAGCTTATATCCAGCGACAA
 GCTGACGGTCTCCTCAGAAGAGAAGGTGTTCAAGCTGTGATTTTATGGATCAATTACGAGAAGGAGACT
 CGCCTAGACCACATGGCAAAGCTGATGGAGCACGTCCGGCTCCCTCTGTTACCGAGAGATTACCTGGTCC
 AGACAGTTGAGGAGGAAGCTTTGATCAAGAACAACAACACCTGTAAAGACTTCTCATCGAAGCCATGAA
 GTACCACCTCTGCTCTTGACCAGAGGCTCTTGATCAAGAACCCAGGACCAAGCCCGGACTCCAGTC
 AGCCTGCCAAGGTATGATTGTGGTGGTGGCCAGGCACCAAGGCGATCCGCAGCGTGGAGTGTGGTGT
 ACTTCGAGGAGGGCCGCTGGGACCAGATAGCCGAGCTTCCCTCCAGAAGATGCAGAGCAGGTGTGGTGT
 CATGGCAGGCCACGTGTATGCCGTGGGTGGCTTTAACGGCTCTCTGCGGGTCCGGACAGTGGATGTGTAC
 GATGGAGTGAAGGACCAGTGGACGTCCATTGCCAGCATGCAGGAGCGCCGGAGCACCCCTGGGTGCGGCCG
 TGCTCAATGACCTTCTCTACGCAGTCGGAGGCTTCGACGGCAGTACCGGCTGGCATCCGTAGAAGCCTA
 CAGCTACAAGACCAATGAGTGGTTCTTCGTGGCCCTATGAACACACGGCGGAGCAGCGTGGGAGTGGGT
 GTTGTGGAGGGGAAGCTGTATGCCGTGGGGGTACGATGGTGTTCAGGCAGTGCCTGAGCACCGTGG
 AGCAGTACAACCCAGCCACCAACGAGTGGATATACGTGGCAGACATGAGCACCCGACGAGTGGCGCTGG
 GGTGGGGTGTCTCAGCGGACAGTGTATGCCACCGGGGACATGACGGACCCTTGGTGGGAAGAGTGT
 GAAGTTTACGATCCTGGGACAAACACTTGAAGCAGGTGGCAGACATGAACATGTCCCGGCAACGCGAG
 GGTCTGTGCGGTGAATGGGCTACTGTACGTAGTTGGAGGGGACGACGGATCGTGAATCTGGCTTCAGT
 AGAGTACTACAACCCAGTACAGACAAGTGGACACTGCTGCCACCAACATGAGCACTGGGAGGAGCTAT
 GCAGGTGTGCTGTGATTCACAAATCCCT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1955_d10.zip

Restriction Sites: SgfI-MluI

ACCN: NM_001195075

Insert Size: 1923 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: [NM_001195075.1](#), [NP_001182004.1](#)

RefSeq Size: 2142 bp

RefSeq ORF: 1923 bp

Locus ID: 100503085

UniProt ID: [E0CZ16](#)

Cytogenetics: 13 B1

Gene Summary: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a regulator of ion transport in the distal nephron (PubMed:25831548, PubMed:28052936). The BCR(KLHL3) complex acts by mediating ubiquitination of WNK4, an inhibitor of potassium channel KCNJ1, leading to WNK4 degradation (By similarity). The BCR(KLHL3) complex also mediates ubiquitination and degradation of CLDN8, a tight-junction protein required for paracellular chloride transport in the kidney (PubMed:25831548).[UniProtKB/Swiss-Prot Function]