

## Product datasheet for **MR209189**

### **KIhI25 (NM\_001122780) Mouse Tagged ORF Clone**

#### **Product data:**

|                                  |                                |
|----------------------------------|--------------------------------|
| <b>Product Type:</b>             | Expression Plasmids            |
| <b>Tag:</b>                      | Myc-DDK                        |
| <b>Symbol:</b>                   | KIhI25                         |
| <b>Synonyms:</b>                 | 2810402K13Rik; BC027373; Enc-1 |
| <b>Mammalian Cell Selection:</b> | Neomycin                       |
| <b>Vector:</b>                   | pCMV6-Entry (PS100001)         |
| <b>E. coli Selection:</b>        | Kanamycin (25 ug/mL)           |



**ORF Nucleotide Sequence:** >MR209189 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTCAGTCAGTGTTACGAGACCCGCAAGTCGAGGAGCAGCAGGGCTCCATGAACATCTCAGTCTTCC  
ACAAGGCTTACACCCCTGACTGTGTGCTGGCCACCTCAACACTCTGCGCAAGCACTGCATGTTACGGA  
TGTCACACTCTGGGCTGGTGACCGAGCCTTTCTTGCCATCGTGCGGTGCTGGCTGCCTCCAGCCGATAC  
TTTGAGGCCATGTTACGCCACGGCTGCGGGAAGCCGGGATGATACGGTCAACTTCCAGGACAACCTGC  
ACCCGAGGTGTTGGAGCTGCTGTTGGACTTTGCCTACTCTTCTCGCATCGTCATCAATGAGGAGAACGC  
GGAGTCACTACTAGAGGCTGGTGACATGCTGCAGTTCCATGATGTCGGGATGCAGCTGCTGAGTTCCTG  
GAGAAGAATCTTTCCCTCCAACTGCCTTGGCATGATGGTGTCTGATGCCACCAAGTCCGACGGC  
TCTACGAGTTCTCATGCCAATGTCCCTGGTGCAATTTGAGACGGTGCGGCAGAGCGAGGACTTCAACAG  
TCTCTCTAGGACACGCTGTTGGACCTCATCTCCAGAGACGAGCTGGAGACTGAGGATGAGCGCGTGGTC  
TTTGAGGCCATCCTGCAGTGGGTGAAGCATGACTTAGAGCAGAGGAAGGCCACCTGCCCTGCTCCTGC  
GTAACGTGCGACTGGCCCTGCTGCCCTCAGACTGCCTGAAGAATGCCGTATCTGGAGAGGCCCTCCTCAT  
GGCAGACGAGTGACCAAGCTCATCTTAGACGAGGCCCTCCGCTGCAAGACCAAGATCTTGCTGAATGAT  
GGTGTGGTCAACAGTCCCTTTGCCCGGCTCGCAAGGCAGGTACACACTGCTCATCTTGGGAGGCCAGA  
CCTTCATGTGTGACAAGATCTACCAAGTGACCACAAAGCCAAGGAGATTATCCCAAGGCAGATCTGCC  
AAGCCCCCGAAGGAGTTCAGTGCTTCAGCGATTGGTTGCAAGGTCTATGTGACTGGAGGCAGGGCTCT  
GAGAATGGAGTCTCTAAGGATGTCTGGGTGTATGACACTGTCCATGAGGAATGGTCTAAGGCCGCCCTA  
TGCTGATTGCCGCTTTGGCCATGGCTCAGCCGAGCTGGAGAACTGTCTCTATGTGGTGGGGGGCATA  
ATCCCTAGCAGGATTTTCCCTGCCTCCCTTCTGTCTCCCTGAAGCAAGTAGAGAAATATGACCTGGG  
GATAATAAGTGAGTATGGTGGCCCCATGAGAGACGGTGTGAGCAATGCTGCAGTGGTGAAGTGC  
TGAAACTCTTTGTGTTGGAGGGACCATCCACCGAGATATGGTGTCCAAAGTCCAGTGTGTTGACCC  
CTCGGAGAACCCTGGACAATCAAAGCAGAGTGTCCCGAGCCCTGGCGATACACAGCCGCGCTGTCTG  
GGCAGCCAGATCTTCATCATGGGAGGTGATACAGAGTACACAGCAGCTTCAGCCTACCGCTTCGACTGTG  
AGACCAACCAAGTGGACGCGGATTGGGGACATGACAGCCAAACGCATGTCTGTGATGCCGTGGCTTCAGG  
CAACAAGCTGTATGTGGTGGGAGGCTACTTTGGGACCCAGAGGTGTAAGACCCTGGACTGCTATGACCT  
ACTTCAGACACATGGAAGTGCATCACCCTGTGCCCTACTCTCTCATTCCACGGCCTTTGTAGACCT  
GGAAGCATCTGCCTGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

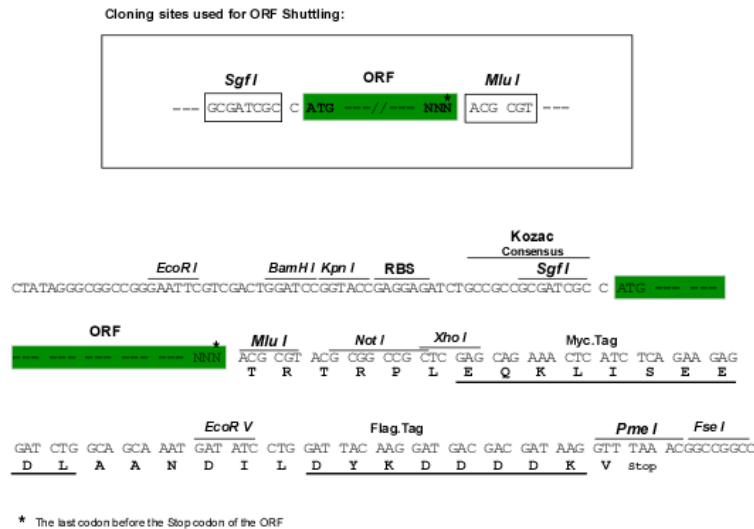
**Protein Sequence:** >MR209189 protein sequence  
Red=Cloning site Green=Tags(s)

MSVSVHETRKSRSSTGSMNISVFHKASHPDCVLAHLNLTNRKHCMTDVTWLAGDRAFPCHRAVLAASSRY  
FEAMFSLHRESRDDTVNFDNLHPEVLELLLDFAYSRIVINEENAEESLLEAGDMLQFHDVDRDAAAEFL  
EKNLSPSNCLGMMVLSDAHQCRRLYEFSCRMSLVHFEVTRQSEDFNSLSRDTLDLISRDELETEDERVV  
FEAILQWVKHDLQKRAHLPLLLRNVRALLPSDCLKNAVSGEALLMADECTKLILDEAFRCKTKILLND  
GVVTSFPARPRKAGHTLLILGGQTFMCDKIYQVDHKAKEIIPKADLPSPRKEFSASAIGCKVYVVTGGRGS  
ENGVSQDVVWYDTVHEEWSKAAPMLIARFGHGSAELENCLYVVGHTSLAGIFPASPSVSLKQVEKYDPG  
DNKWTMVAPMRDGVSNAAVVS AKLKFVFGGTSIHRDMVSKVQCFDPSENRWITKAECPPQWRYTAAAVL  
GSQIFIMGQDTEYTAASAYRFDCEINQWTRIGDMTAKRMSCHAVASGNKLYVVGYYFGTQRCKTLDCYDP  
TSDTWNCITTVPSLIPTAFVSTWKHLPA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



ACCN: NM\_001122780

ORF Size: 1767 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\\_001122780.1](#), [NP\\_001116252.1](#)

RefSeq Size: 3374 bp

RefSeq ORF: 1770 bp

Locus ID: 207952

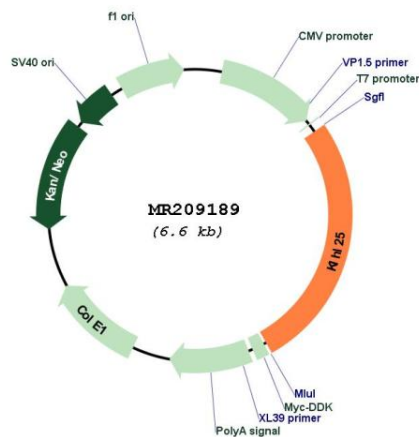
UniProt ID: [Q8R2P1](#)

Cytogenetics: 7 D1

MW: 65.8 kDa

**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]

## Product images:



Circular map for MR209189