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# Product datasheet for RC202182

## IKB beta (NFKBIB) (NM_002503) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | IKB beta (NFKBIB) (NM_002503) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | IKB beta |
| **Synonyms:** | IKBB; TRIP9 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC202182 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGGGGTCGCGTGCTTGGGAAAAGCTGCCGACGCAGATGAATGGTGCGACAGCGGCCTGGGCTCCC
TGGGTCCGGACGCAGCGGCCCCCGGAGGACCTGGGTTGGGCGCGGAGTTGGGCCCGGGGCTGTCGTGGGC
TCCCCTCGTCTTCGGCTACGTCACTGAGGATGGGGACACGGCACTGCACTTGGCTGTGATTCATCAGCAT
GAACCCTTCCTGGATTTTCTTCTAGGCTTCTCGGCCGGCACTGAGTACATGGACCTGCAGAATGACCTAG
GCCAGACAGCCCTGCACCTGGCAGCCATCCTGGGGGAGACATCCACGGTGGAGAAGCTGTACGCAGCAGG
CGCCGGGCTGTGTGTGGCGGAGCGTAGGGGCCACACGGCGCTGCACCTGGCCTGCCGTGTGGGGGCACAC
GCCTGTGCCCGTGCCCTGCTTCAGCCCCGCCCCCGGCGCCCCAGGGAAGCCCCCGACACCTACCTCGCTC
AGGGCCCTGACCGTACTCCCGACACCAACCATACCCCTGTCGCCTTGTACCCCGATTCCGACTTGGAGAA
GGAAGAAGAGGAGAGTGAGGAGGACTGGAAGCTGCAGCTGGAGGCTGAAAACTACGAGGGCCACACCCCA
CTCCACGTGGCCGTTATCCACAAAGATGTGGAGATGGTCCGGCTGCTCCGAGATGCTGGAGCTGACCTTG
ACAAACCGGAGCCCACGTGCGGCCGGAGCCCCCTTCATTTGGCAGTGGAGGCCCAGGCAGCCGATGTGCT
GGAGCTTCTCCTGAGGGCAGGCGCGAACCCTGCTGCCCGCATGTACGGTGGCCGCACCCCACTCGGCAGT
GCCATGCTCCGGCCCAACCCCATCCTCGCCCGCCTCCTCCGTGCACACGGAGCCCCTGAGCCCGAGGGCG
AGGACGAGAAATCCGGCCCCTGCAGCAGCAGTAGCGACAGCGACAGCGGAGACGAGGGCGATGAATACGA
CGACATTGTGGTTCACAGCAGCCGCAGCCAAACCCGGCTGCCTCCCACCCCAGCCTCAAAACCTCTTCCT
GACGACCCCCGCCCCGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:**

>RC202182 protein sequence
Red=Cloning site Green=Tags(s)

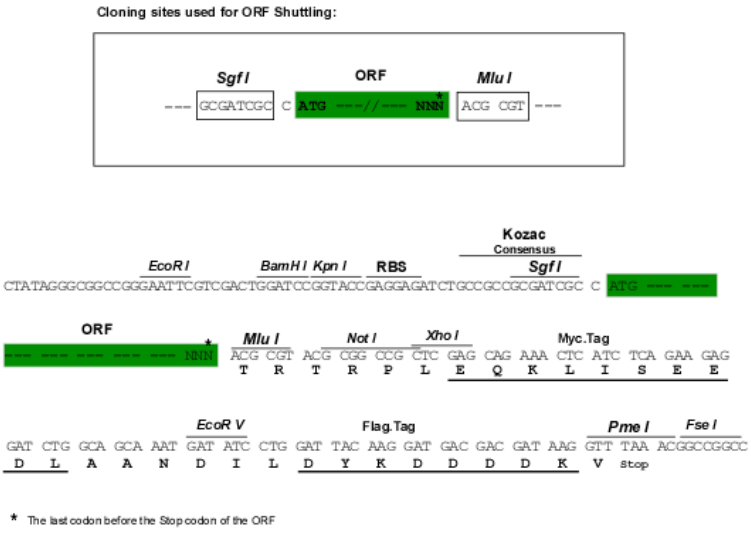
MAGVACLGKAADADEWCDSGLGSLGPDAAAPGGPGLGAELGPGLSWAPLVFGYVTEDGDTALHLAVIHQH
EPFLDFLLGFSAGTEYMDLQNDLGQTALHLAAILGETSTVEKLYAAGAGLCVAERRGHTALHLACRVGAH
ACARALLQPRPRRPREAPDTYLAQGPDRTPDTNHTPVALYPDSDLEKEEEESEEDWKLQLEAENYEGHTP
LHVAVIHKDVEMVRLLRDAGADLDKPEPTCGRSPLHLAVEAQAADVLELLLRAGANPAARMYGGRTPLGS
AMLRPNPILARLLRAHGAPEPEGEDEKSGPCSSSSDSDSGDEGDEYDDIVVHSSRSQTRLPPTPASKPLP
DDPRPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6309_c09.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_002503

**ORF Size:** 1068 bp

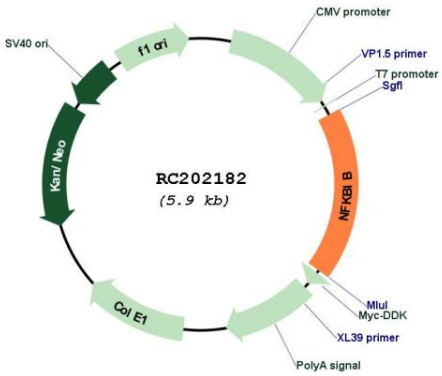
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

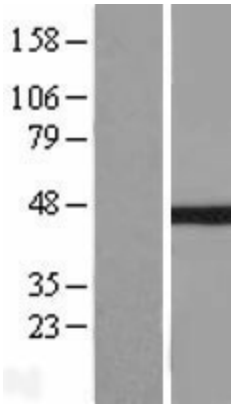
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_002503.5 |
| **RefSeq Size:** | 1243 bp |
| **RefSeq ORF:** | 1071 bp |
| **Locus ID:** | 4793 |
| **UniProt ID:** | Q15653 |
| **Cytogenetics:** | 19q13.2 |
| **Domains:** | ANK |
| **Protein Families:** | Stem cell - Pluripotency, Transcription Factors |
| **Protein Pathways:** | Adipocytokine signaling pathway, B cell receptor signaling pathway, Chemokine signaling pathway, Cytosolic DNA-sensing pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, RIG-I-like receptor signaling pathway, T cell receptor signaling pathway |
| **MW:** | 37.8 kDa |
| **Gene Summary:** | The protein encoded by this gene belongs to the NF-kappa-B inhibitor family, which inhibit NF-kappa-B by complexing with, and trapping it in the cytoplasm. Phosphorylation of serine residues on these proteins by kinases marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NF-kappa-B, which translocates to the nucleus to function as a transcription factor. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Jul 2011] |

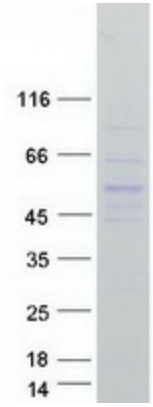
## Product images:




Circular map for RC202182




Western blot validation of overexpression lysate (Cat# [LY419285]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202182 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified NFKBIB protein (Cat# [TP302182]). The protein was produced from HEK293T cells transfected with NFKBIB cDNA clone (Cat# RC202182) using MegaTran 2.0 (Cat# [TT210002]).