

## Product datasheet for **RC209464**

### NKIRAS2 (NM\_017595) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NKIRAS2 (NM\_017595) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NKIRAS2  
**Synonyms:** kappaB-Ras2; KBRAS2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC209464 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAAGAGCTGCAAGGTGGTCGTGTGGCCAGGCGTCTGTGGGCAAACCTCAATCCTGGAGCAGC  
TTCTGTATGGGAACCATGTAGTGGGTTCCGAGATGATCGAGACGCAGGAGGACATCTACGTGGGCTCCAT  
TGAGACAGACCGGGGGTGGCAGAGCAGGTGCGTTTCTATGACACCCGGGGGCTCCGAGATGGGGCCGAA  
CTGCCCGACACTGCTTCTCTTGCCTGATGGCTACGTCCTGGTCTATAGCACAGATAGCAGAGAGTCTT  
TTCAGCGTGTGGAGCTGCTCAAGAAGGAGATTGACAAATCCAAGGACAAGAAGGAGGTACCATCGTGGT  
CCTTGGCAACAAGTGTGACTTACAGGAGCAGCGCGTGTAGACCCAGATGTGGCTCAGCACTGGGCCAAG  
TCAGAGAAGGTGAAGCTGTGGGAGGTGTAGTGGCGGACCGCGCTCCCTCCTGGAGCCCTTTGTCTACT  
TGGCCAGCAAGATGACGCAACCCAGAGCAAGTCTGCCTCCCCCTCAGCCGGAAGAACAAGGGCAGCGG  
CTCCTTGGATGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209464 protein sequence  
Red=Cloning site Green=Tags(s)

MGKSKVVVCGQASVGKTSILEQLLYGNHVVGSEMIETQEDIYVGSJETDRGVREQVRFYDTRGLRDGAE  
LPRHCFSDTGYVLVYSTDSRESFQVVELLKEIDKSKDKKEVTIVVLGNKCDLQEQRVDPDVAQHWAK  
SEKVKLWEVSVADRRSLLEPFVYLASKMTQPQSKSAFPLSRKNKGSGLDG

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6355\\_h11.zip](https://cdn.origene.com/chromatograms/mk6355_h11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_017595

**ORF Size:** 573 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.

**RefSeq:** [NM\\_017595.6](#)

**RefSeq Size:** 2474 bp

**RefSeq ORF:** 576 bp

**Locus ID:** 28511

UniProt ID: [Q9NYR9](#)

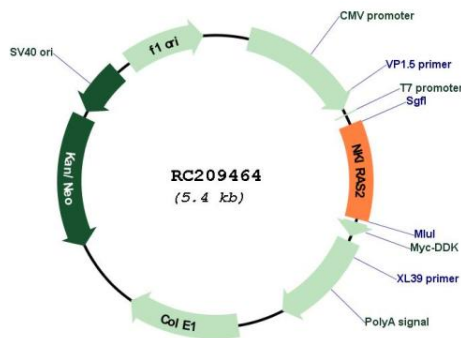
Cytogenetics: 17q21.2

Domains: RAS, RAB

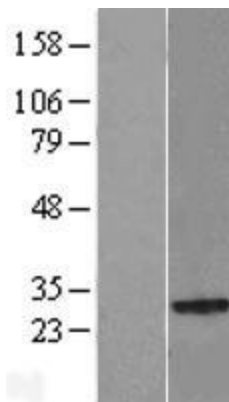
MW: 21.5 kDa

**Gene Summary:** Atypical Ras-like protein that acts as a potent regulator of NF-kappa-B activity by preventing the degradation of NF-kappa-B inhibitor beta (NFKBIB) by most signals, explaining why NFKBIB is more resistant to degradation. May act by blocking phosphorylation of NFKBIB and nuclear localization of p65/RELA NF-kappa-B subunit. It is unclear whether it acts as a GTPase. Both GTP- and GDP-bound forms block phosphorylation of NFKBIB (By similarity). [UniProtKB/Swiss-Prot Function]

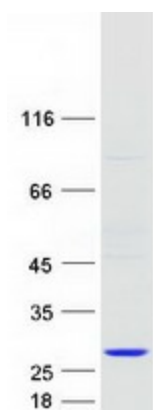
### Product images:



Circular map for RC209464



Western blot validation of overexpression lysate (Cat# [LY428581]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226742] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NKIRAS2 protein (Cat# [TP309464]). The protein was produced from HEK293T cells transfected with NKIRAS2 cDNA clone (Cat# RC209464) using MegaTran 2.0 (Cat# [TT210002]).