

Product datasheet for **RG226742**

NKIRAS2 (NM_001144927) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NKIRAS2 (NM_001144927) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NKIRAS2
Synonyms: kappaB-Ras2; KBRAS2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG226742 representing NM_001144927
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAGAGCTGCAAGGTGGTCGTGTGGCCAGGCGTCTGTGGGCAAACCTCAATCCTGGAGCAGC
TTCTGTATGGGAACCATGTAGTGGGTTCCGAGATGATCGAGACGCAGGAGGACATCTACGTGGGCTCCAT
TGAGACAGACCGGGGGTGCAGAGCAGGTGCGTTTCTATGACACCCGGGGCTCCGAGATGGGGCCGAA
CTGCCCGACACTGCTTCTCTTGCCTGATGGCTACGTCCTGGTCTATAGCACAGATAGCAGAGAGTCTT
TTCAGCGTGTGGAGCTGCTCAAGAAGGAGATTGACAAATCCAAGGACAAGAAGGAGGTACCATCGTGGT
CCTTGGCAACAAGTGTGACTTACAGGAGCAGCGCGTGTAGACCCAGATGTGGCTCAGCACTGGGCCAAG
TCAGAGAAGGTGAAGCTGTGGGAGGTGTCAAGTGGCGGACCGCGCTCCCTCCTGGAGCCCTTTGTCTACT
TGGCCAGCAAGATGACGCAACCCAGAGCAAGTCTGCCTCCCTCAGCCGGAAGAACAAGGGCAGCGG
CTCCTTGATGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226742 representing NM_001144927
Red=Cloning site Green=Tags(s)

MGKSKVAVVCGQASVGKTSILEQLLYGNHVVGSEMIETQEDIYVGSIIETDRGVREQVRFYDTRGLRDGAE
LPRHCFSTDGYLVYSTDSRESFQRVELLKKEIDKSKDKKEVTIVVLGNKCDLQEQRVDPDVAQHAWK
SEKVKLWEVSVADRRSLLEPFVYLASKMTQPQSKSAFPLSRKNKGSGLDG

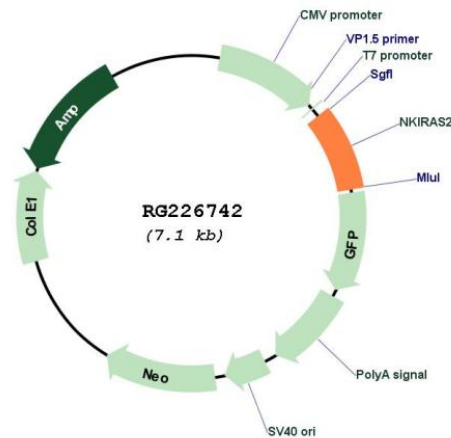
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001144927

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_001144927.2](#)

RefSeq Size: 2493 bp

RefSeq ORF: 576 bp

Locus ID: 28511

UniProt ID: [Q9NYR9](#)

Cytogenetics: 17q21.2

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]