

Product datasheet for **MC209975**

Rfk (NM_019437) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rfk (NM_019437) Mouse Untagged Clone
Tag: Tag Free
Symbol: Rfk
Synonyms: 0610038L10Rik; AF031381; KOI-4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC209975 representing NM_019437
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAGCCTGCCGTTCTTCTGCCGGGCCAGGTGGTGCCTGGCTTCGGCCGGGCTCCAAGCAACTGG
GCATCCCCACAGCCAATTTCTGAACAAGTGGTGGACAATCTCCAGCTGATGTGTCTACTGGCATTTA
TTATGGTTGGCCAGCGTTGGGAGCGCGATGTCCATAAAATGGTGGTGGCATTGGATGGAACCCGTAC
TATAAGAATGTAAAAAGTCCATGGAACACACATCATCCATACCTTCAAAGAGGACTTCTATGGGGAAA
TTCTCAATGTGGCATTGTTGGCTATCTCAGACCTGAAAAGAAGCTTTGATTCTTTAGAGTCACTTATTT
TGCAATTCAGGTGATATTGAAGAAGCTAAAAGCAACTGGATTTACCCGAACATTTGAAACTCAAAGAT
GATAATTTCTTCCAAGTTTCTAAAGGCAAATTATGAATGGCCAC**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_019437
Insert Size: 468 bp



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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_019437.3](#), [NP_062310.1](#)

RefSeq Size: 2482 bp

RefSeq ORF: 468 bp

Locus ID: 54391

UniProt ID: [Q8CFV9](#)

Cytogenetics: 19 B

Gene Summary: Catalyzes the phosphorylation of riboflavin (vitamin B2) to form flavin-mononucleotide (FMN), hence rate-limiting enzyme in the synthesis of FAD. Essential for TNF-induced reactive oxygen species (ROS) production. Through its interaction with both TNFRSF1A and CYBA, physically and functionally couples TNFRSF1A to NADPH oxidase. TNF-activation of Rfk may enhance the incorporation of FAD in NADPH oxidase, a critical step for the assembly and activation of NADPH oxidase (By similarity).[UniProtKB/Swiss-Prot Function]