

Product datasheet for **MG201161**

Rfk (NM_019437) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rfk (NM_019437) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Rfk
Synonyms: 0610038L10Rik; AF031381; KOI-4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201161 representing NM_019437
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAGCCTGCCGTTCTTCTGCCGCGCCAGGTGGTGCCTGGCTTCGGCCGGCTCCAAGCACTGG
GCATCCCCACAGCCAATTTCTGAACAAGTGGTGGACAATCTCCAGCTGATGTGTCTACTGGCATTTA
TTATGGTTGGCCAGCGTTGGGAGCGCGATGTCCATAAAATGGTGGTGGCATTGGATGGAACCCGTAC
TATAAGAATGTAAAAAGTCCATGAAACACACATCATCCATACCTTCAAAGAGGACTTCTATGGGGAAA
TTCTCAATGTGGCATTGTTGGCTATCTCAGACCTGAAAAGAAGCTTTGATTCTTTAGAGTCACTTATTT
TGCAATTCAGGTGATATTGAAGAAGCTAAAAGCAACTGGATTTACCCGAACATTTGAAACTCAAAGAT
GATAATTTCTTCCAAGTTTCTAAAGCAAATATGAATGGCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201161 representing NM_019437
Red=Cloning site Green=Tags(s)

MRSLPFFCRGQVVRGFRGRSKQLGIPTANFPEQVVDNLPADVSTGIYYGWASVSGSDVHKMVSIGWNPY
YKNVKSMETHIHTFKEDFYGEILNVAIVGYLRPEKNFDSLESLISAIQGDIEEAKKQLDPEHLKLDK
DNFFQVSKGKIMNGH

TRTRPLE - GFP Tag - V

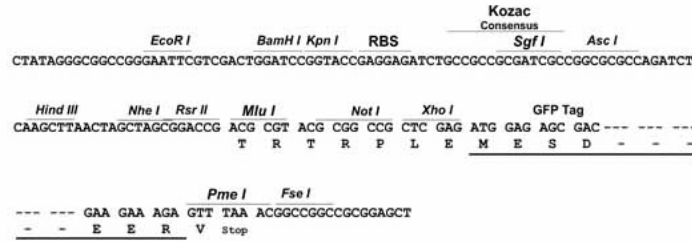
Restriction Sites: SgfI-MluI



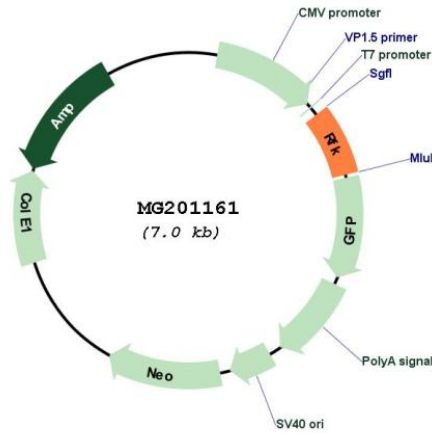
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Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_019437
 ORF Size: 465 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_019437.3, NP_062310.1</p>
RefSeq Size:	<p>2482 bp</p>
RefSeq ORF:	<p>468 bp</p>
Locus ID:	<p>54391</p>
UniProt ID:	<p>Q8CFV9</p>
Cytogenetics:	<p>19 B</p>
Gene Summary:	<p>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]</p>