

Product datasheet for MR218124

Rnf41 (NM_001164237) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rnf41 (NM_001164237) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rnf41
Synonyms:	2210404G21Rik; 4930511A05Rik; 4933415P08Rik; D10Ertd722e; FLRF; Nrdp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218124 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTATGATGTGACCCGTTTCCAGGGGACGTTGACGAGGACCTTATCTGCCCTATTTGCAGTGGAG
TCTTGGAGGAGCCAGTGCAGGCGCTCATTGTGAGCATGCCTTCTGCAACGCCTGCATCACCCAATGGTT
CTCTCAGCAGCAGACGTGCCGGTAGACCGTAGCGTTGTCACGGTTGCCACCTGCGCCAGTACCTCGG
ATCATGCGGAACATGTTGTCAAAGCTACAGATTGCCTGTGACAACGCTGTGTTGGCTGCAGTGTGTTG
TCAGGCTTGACAACCTCATGTCCCACCTCAGTACTGTGAGCACAACCCGAAGCGCCTGTGACCTGTGA
GCAGGGCTGTGGCCTGGAGATGCCCAAAGATGAACTGCCAAACCAATTGCATTAAGCACCTGCGCTCC
GTGGTCCAGCAGCAGCAGTCCGCGCATTGCAAGCTGGAGAAGACCTCGGCTGAACACAAGCACCAGCTGG
CAGAGCAGAAGCGAGACATTCAGCTGCTGAAGGCGTATATGCGAGCCATCCGCGAGTGTCAACCCCAACT
TCAGAACCTGGAGGAGACAATCGAATACAATGAGATCCTCGAGTGGGTGAACTCCCTGCAGCCGGCAAGG
GTGACCCGCTGGGGGGCATGATCTCCACTCCTGATGTGTGCTCCAGGCTGTCAAGCGCTCCCTCG
TGGAAAGTGGCTGCCCGCCTCCATCGTCAACGAGCTGATTGAAAATGCCCATGAACGCAGCTGGCCCCA
GGTCTGGCCACACTAGAGACAAGACAGATGAACCGCGCTACTATGAGAACTACGTGGCCAAGCGCATC
CCTGGCAAGCAGGCTGTAGTGGTGTGGCTGTGAGAACCGACATGGGGGACGACATGGTGCAGGAGC
CAGGGCTCGTCATGATATTTGCGCATGGTGTGGAGGAGATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR218124 protein sequence
Red=Cloning site Green=Tags(s)

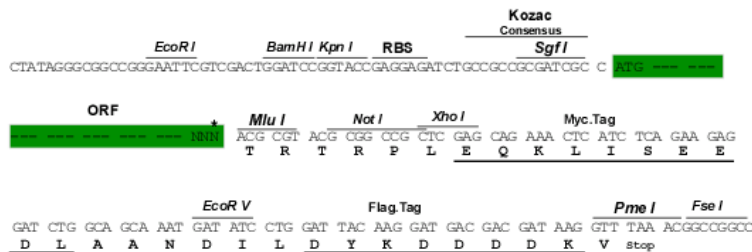
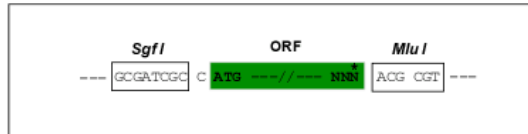
MGYDVTRFQGDVDEDLICPICSGVLEEPVQAPHCEHAFNCACITQWFSQQQTCPVDRSVVTV AHLRPVPR
 IMRNMLSKLQIACDNAVFGCSAVVRLDNLMSHLSDCEHNPKRPTCEQGCGLEMPKDELPHNHCIKHLRS
 VVQQQSRIAELEKTSAEHKKQLAEQKRDIQLLKAYMRAIRSVNPNLQNL EETIEYNEILEWVNSLQPAR
 VTRWGGMISTPDAVLQAVIKRSLVESGCPASIVNELIENAHERSWPQGLATLETRQMNRRYYENYVAKRI
 PGKQAVVVMACENQHMGGDDMVQEPGLVMIFAHGVVEEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001164237

ORF Size: 954 bp

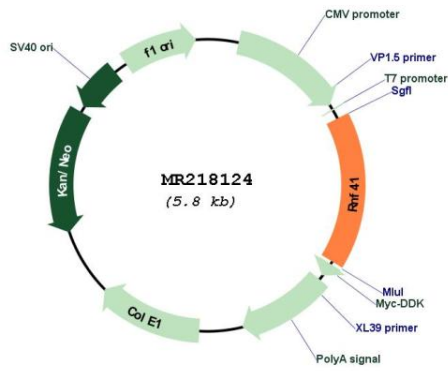
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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:	NM_001164237.1 , NP_001157709.1
RefSeq Size:	4394 bp
RefSeq ORF:	954 bp
Locus ID:	67588
UniProt ID:	Q8BH75
Cytogenetics:	10 76.55 cM
MW:	35.9 kDa
Gene Summary:	<p>Acts as E3 ubiquitin-protein ligase and regulates the degradation of target proteins. Polyubiquitinates MYD88 (By similarity). Negatively regulates MYD88-dependent production of proinflammatory cytokines. Can promote TRIF-dependent production of type I interferon and inhibits infection with vesicular stomatitis virus. Promotes also activation of TBK1 and IRF3 (PubMed:19483718). Involved in the ubiquitination of erythropoietin (EPO) and interleukin-3 (IL-3) receptors. Thus, through maintaining basal levels of cytokine receptors, RNF41 is involved in the control of hematopoietic progenitor cell differentiation into myeloerythroid lineages (PubMed:18495327). Contributes to the maintenance of steady-state ERBB3 levels by mediating its growth factor-independent degradation. Involved in the degradation of the inhibitor of apoptosis BIRC6 and thus is an important regulator of cell death by promoting apoptosis. Acts also as a PRKN modifier that accelerates its degradation, resulting in a reduction of PRKN activity, influencing the balance of intracellular redox state. The RNF41-PRKN pathway regulates autophagosome-lysosome fusion during late mitophagy. Mitophagy is a selective form of autophagy necessary for mitochondrial quality control (PubMed:24949970).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR218124