

# **Product datasheet for RR211028**

## Rnf5 (NM\_001109025) Rat Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Rnf5 (NM\_001109025) Rat Tagged ORF Clone

Tag: Myc-DDK

Symbol: Rnf5

Synonyms: MGC109637

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RR211028 representing NM\_001109025
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCAGCAGCAGAGGAAGAGGACGGGGGCCCCGAAGGGCCAAATCGCGAGCGGGGCGGGGCGAGCGCGAGCCGCAACCTCTATTG
CTTCGAATGTAATATATGTTTGGAGACAGCTCGCGAAGCTGTGGTCAGCGTGTGTGGCCACCTCTATTG
TTGGCCCTGTCTCCATCAGTGGCTGGAGACACGGCCAGACCGGCAAGAATGCCCGGTGTGTAAAGCCGGA
ATAAGCAGGGAGAAGGTCGTCCCTCTTTATGGTCGAGGGAGCCAGAAGCCACAGGATCCCAGATTGAAAA
CCCCACCCCGCCCTCAGGGCCAGCGCCAGCTCCGGAGAGCAGAGGGGGGTTCCAGCCATTCGGTGATGC
AGGGGGATTTCACTTCTCTTTTGGTGTTGGCGCCTTCCCCTTTGGCTTCTTTACCACCGTGTTCAATGCC
CACGAGCCTTTCCGAAGGGGTGCAGGTGTGGATCTGGGGCAGGGTCACCCAGCCTCCAGCTGGCAAGATT
CCTTGTTCCTGTTCCTCGCCATCTTTTTCTTTTTCTGGCTGCTCAGTATT

 ${\color{blue} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$ 

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR211028 representing NM\_001109025

Red=Cloning site Green=Tags(s)

MAAAEEEDGGPEGPNRERGGASATFECNICLETAREAVVSVCGHLYCWPCLHQWLETRPDRQECPVCKAG ISREKVVPLYGRGSQKPQDPRLKTPPRPQGQRPAPESRGGFQPFGDAGGFHFSFGVGAFPFGFFTTVFNA

HEPFRRGAGVDLGQGHPASSWQDSLFLFLAIFFFFWLLSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-Mlul



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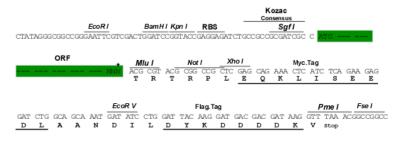
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CN: techsupport@origene.cn



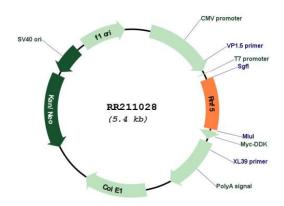
#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

### Plasmid Map:



ACCN: NM\_001109025

ORF Size: 540 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: <u>NM 001109025.2</u>, <u>NP 001102495.1</u>

 RefSeq Size:
 1142 bp

 RefSeq ORF:
 543 bp

 Locus ID:
 407784

 UniProt ID:
 Q5M807

 Cytogenetics:
 20p12

 MW:
 19.8 kDa

Gene Summary: Has E2-dependent E3 ubiquitin-protein ligase activity. May function together with E2

ubiquitin-conjugating enzymes UBE2D1/UBCH5A and UBE2D2/UBC4. Mediates ubiquitination of PXN/paxillin. May be involved in regulation of cell motility and localization of PXN/paxillin. Mediates the 'Lys-63'-linked polyubiquitination of JKAMP thereby regulating JKAMP function

by decreasing its association with components of the proteasome and ERAD; the

ubiquitination appears to involve E2 ubiquitin-conjugating enzyme UBE2N. Mediates the 'Lys-48'-linked polyubiquitination of TMEM173 at 'Lys-150' leading to its proteasomal degradation; the ubiquitination occurs in mitochondria after viral transfection and regulates antiviral

responses.[UniProtKB/Swiss-Prot Function]