

Product datasheet for **RC203224**

RNF166 (NM_178841) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RNF166 (NM_178841) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RNF166
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203224 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTATGTTCCGCAGCCTGGTGGCCTCGGCTCAGCAGCGGCAGCCGCCGGCCGGGCGGGCGGGCGGCG
ACAGCGGCCTGGAGGCGCAGTACACCTGCCCATCTGCCTGGAGGTCTATCACCGGCCCGTGGCCATCGG
CAGCTGCGGCCACACGTTCTGCGGGGAGTGTCTCCAGCCCTGCCTGCAGGTGCCATCCCCGCTGTGCCA
CTGTGCCGCTGCCCTTCGACCCCAAGAAGGTGGACAAGGCCACCCACGTGGAGAAGCAGCTCTCATCCT
ACAAAGCGCCCTGTCGAGGCTGCAACAAAAGGTGACCCTGGCAAAGATGAGAGTGCACATTTCTGCTCTG
CCTGAAGGTCCAGGAGCAGATGGCCAAGTCCCAAGTTCGTCGCCGTGGTGCCACATCACAGCCTATC
CCCAGCAACATCCCAACAGGTCCACCTTCGCCTGCCCGTACTGTGGTGCCCGCAACCTGGACCAGCAGG
AGCTGGTGAAGCACTGTGTGAAAGCCACCGCAGCGACCCCAACCGCGTGGTGTGCCCATCTGCTCGGC
AATGCCCTGGGGGACCCAGCTACAAGAGCGCAACTTCCTGCAGCACCTGCTTACCGACACAAGTTC
TCCTACGACACCTTTGTGGACTACAGTATTGACGAGGAGGCCGCTTCCAGGCTGCTCTGGCCCTGTCTC
TCTCTGAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203224 protein sequence
Red=Cloning site Green=Tags(s)

MAMFRSLVASAQQRQPPAGPAGGDSGLEAQYTCPICLEVYHRPVAIGSCGHTFCGECLQPCLQVPSPLCP
 LCRLPFDPKKVDKATHVEKQLSSYKAPCRGCNKKVTLAKMRVHISCLKVQEQMANCPKFVPPVPTSQPI
 PSNIPNRSTFACPYCGARNLDQQLVKHCVESHRSDPNRVVCPICSSAMPWGDPSYKSANFLQHLHRHKF
 SYDTFVDYSIDEEAAFQAALALSLEN

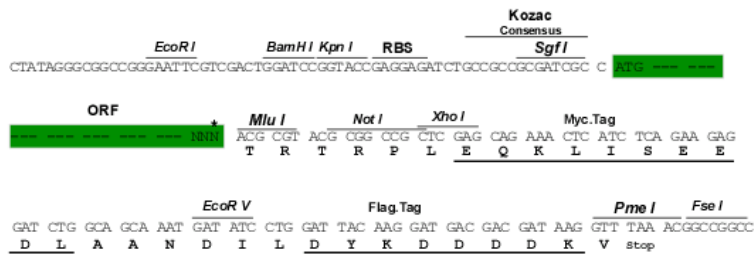
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6434_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_178841

ORF Size: 711 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_178841.2](#), [NP_849163.1](#)

RefSeq Size: 1888 bp

RefSeq ORF: 714 bp

Locus ID: 115992

UniProt ID: [Q96A37](#)

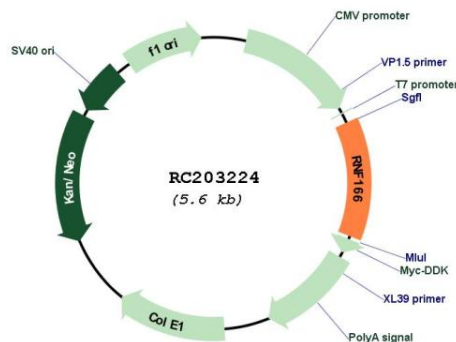
Cytogenetics: 16q24.2-q24.3

Protein Families: Druggable Genome

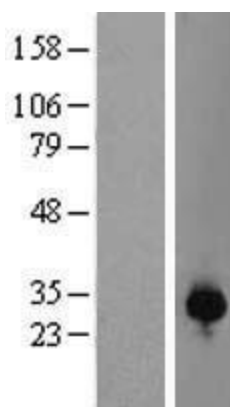
MW: 26.1 kDa

Gene Summary: E3 ubiquitin-protein ligase that promotes the ubiquitination of different substrates (PubMed:27880896). In turn, participates in different biological processes including interferon production or autophagy (PubMed:26456228, PubMed:27880896). Plays a role in the activation of RNA virus-induced interferon-beta production by promoting the ubiquitination of TRAF3 and TRAF6 (PubMed:26456228). Plays also a role in the early recruitment of autophagy adapters to bacteria (PubMed:27880896). Mediates 'Lys-29' and 'Lys-33'-linked ubiquitination of SQSTM1 leading to xenophagic targeting of bacteria and inhibition of their replication (PubMed:27880896).[UniProtKB/Swiss-Prot Function]

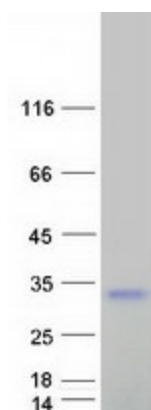
Product images:



Circular map for RC203224



Western blot validation of overexpression lysate (Cat# [LY405857]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203224 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RNF166 protein (Cat# [TP303224]). The protein was produced from HEK293T cells transfected with RNF166 cDNA clone (Cat# RC203224) using MegaTran 2.0 (Cat# [TT210002]).