

Product datasheet for **RG234668**

RNF145 (NM_001199383) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RNF145 (NM_001199383) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RNF145
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG234668 representing NM_001199383
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**

ATGGCTGCAAAGGAGAACTGGAGGCAGTGTTAAATGTGGCCCTGAGGGTGCCAAGCATCATGCTGTTGG
 ATGTCCTGTACAGATGGGATGTCAGCTCCTTTTCCAGCAGATCCAAAGAAGTAGCCTTAGTAATAACCC
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 AGGTACTGAACCCCCAGGCCAGGAGCATACTCCAGGGACCAGGATACAGGAAGGTTCCAGGGACAATAAT
 GAGTACATTGCCAGACGACCAGATAACCAGGAAGGGGCTTTTGACCCCAAGAATATCCTCACAGTGCGA
 AAGATGAAGCACATCCTGTTGAATCAGCC

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234668 representing NM_001199383
 Red=Cloning site Green=Tags(s)

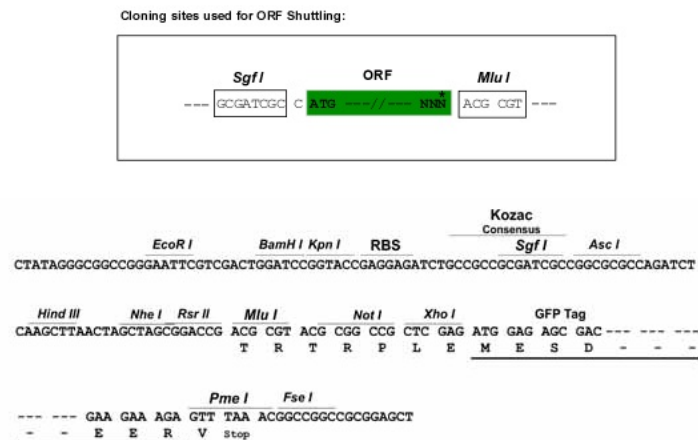
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 VYGLLALGMSLWNQLVVPVLFMVFWLVLFALQIYSYFSTRDQPASRERLLFLFLTSIAECCSTPYSLGL
 VFTVSFVALGVLTLCKFYLQGYRAFMNDPAMNRGMTGVTLILLILAVQTGLIELQVVFHRAFLLSIILFIVV
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 SLQVLGTLFIYVLFMVEEFRKEPVENMDDVIYYVNGTYRLLLEFLVALCVVAYGVSETIFGEWTVMGSMII
 FIHSYNNVWLRAQLGWKSFLLRDAVNKIKSLPIATKEQLEKHNDICAICYQDMKSAVITPCSHFFHAGC
 LKKWLYVQETCPLCHCHLNSSQLPGLGTEPVLQPHAGAEQNMVFQEGTEPPGQEHTPGTRIQEGSRDNN
 EYIARRPDNQEGAFDPKEYPHSAKDEAHPVESA

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001199383

ORF Size: 1989 bp

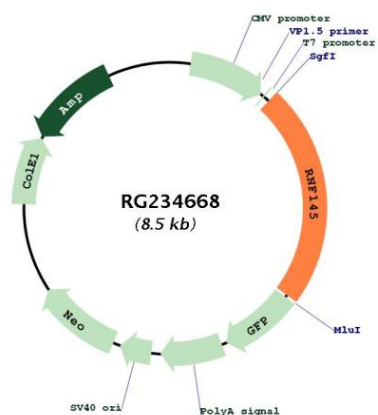
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_001199383.2</u>
RefSeq Size:	3632 bp
RefSeq ORF:	1992 bp
Locus ID:	153830
UniProt ID:	<u>Q96MT1</u>
Cytogenetics:	5q33.3
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	E3 ubiquitin ligase that catalyzes the direct transfer of ubiquitin from E2 ubiquitin-conjugating enzyme to a specific substrate. In response to bacterial infection, negatively regulates the phagocyte oxidative burst by controlling the turnover of the NADPH oxidase complex subunits. Promotes monoubiquitination of CYBA and 'Lys-48'-linked polyubiquitination and degradation of CYBB NADPH oxidase catalytic subunits, both essential for the generation of antimicrobial reactive oxygen species. Involved in the maintenance of cholesterol homeostasis. In response to high sterol concentrations ubiquitinates HMGCR, a rate-limiting enzyme in cholesterol biosynthesis, and targets it for degradation. The interaction with INSIG1 is required for this function. In addition, triggers ubiquitination of SCAP, likely inhibiting its transport to the Golgi apparatus and the subsequent processing/maturation of SREBPF2, ultimately downregulating cholesterol biosynthesis. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG234668