

Product datasheet for **RG234694**

RNF145 (NM_001199382) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RNF145 (NM_001199382) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RNF145
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG234694 representing NM_001199382
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTCTTCTCCAAGAAAAAAAAAAGAAAAAAAAAACACATGGCTGCAAAGGAGAACTGGAGGCAG
 TGTAAATGTGGCCTGAGGGTGCCAAGCATCATGCTGTTGGATGTCCTGTACAGATGGGATGTCAGCTC
 CTTTTCCAGCAGATCCAAAGAAGTAGCCTTAGTAATAACCTCTTTCCAGTATAAGTATTGGCTCTT
 AATATGCATTATGTAGGTTATATCTTAAGTGTGGTGCTGCTAACATTGCCAGGCAGCATCTGGTTCAGC
 TTTATCTATATTTTGGACTGCTCTGCTCCTCTATGCTGGACATCAAATTTCCAGGGACTATGTTCCGAG
 TGAAGTGGAGTTTGCCTATGAGGGACCAATGTATTTAGAACCTCTCTCTATGAATCGGTTTACCACAGCC
 TTAATAGGTCAGTTGGTGGTGTACTTTATGCTCCTGTGTCATGAAAACAAAGCAGATTGGCTGTTTT
 CAGCTCACATGCTTCTCTGCTAGCAGACTCTGCCTTGTTCCTTGGAGACAATTGTTATCATCAATAA
 ATTTGCTATGATTTTACTGGATTGGAAGTTCTCTATTTTCTGGGTCTAATCTTTTGGTACCTTATAAC
 CTTGCTAAATCTGCATACAGAGAATTGGTTCAGGTAGTGGAGGTATATGGCCTTCTCGCCTTGGGAATGT
 CCCTGTGGAATCAACTGGTAGTCCCTGTTCTTTTCATGGTTTTCTGGCTCGTCTTATTTGCTCTTCAGAT
 TTAATCTATTTTCAGTACTCGAGATCAGCCTGCATCACGTGAGAGGCTTCTTTTCTTTTCTGACAAGT
 ATTGCGGAATGCTGCAGCACTCCTTACTCTCTTTTGGGTTTGGTCTTCACGGTTTCTTTTGTTCCTTGG
 GTGTTCTCACACTCTGCAAGTTTACTTGCAGGGTTATCGAGCTTTCATGAATGATCCTGCCATGAATCG
 GGGCATGACAGAGGAGTAACGCTGTTAATCCTGGCAGTGCAGACTGGGCTGATAGAACTGCAGGTTGTT
 CATCGGGCATTCTTGCTCAGTATTATCCTTTTCATTGTCGTAGCTTCTATCCTACAGTCTATGTTAGAAA
 TTGCAGATCCTATTGTTTTGGCACTGGGAGCATCTAGAGACAAGAGCTTGTGAAACACTTCCGTGCTGT
 AAGCCTTTGTTTATTTTATTGGTATTCCCTGCTTATATGGCTTATATGATTTGCCAGTTTTTCCACATG
 GATTTTTGGCTTCTTATCATTATTTCCAGCAGCATTCTTACCTCTCTTCAGGTTCTGGGAACACTTTTTTA
 TTTATGTCTTATTTATGGTTGAGGAATTCAGAAAAGAGCCAGTGGAAAACATGGATGATGTCATCTACTA
 TGTGAATGGCACTTACCGCCTGCTGGAGTTTCTTGTGGCCCTCTGTGTGGTGGCCTATGGCGTCTCAGAG
 ACCATCTTTGGAGAATGGACAGTGATGGGCTCAATGATCATCTTCATTCTTCTACTATAACGTGTGGC
 TTCGGGCCAGCTGGGTGGAAGAGCTTCTTCTCCGAGGGATGCTGTGAATAAGATTAATCGTTACC
 CATTGCTACGAAAGAGCAGCTTGAGAAACACAATGATATTTGTGCCATCTGTTATCAGGACATGAAATCT
 GCTGTGATCACGCCTTGCACTATTTTTCCATGCAGGCTGTCTTAAGAAATGGCTGTATGTCCAGGAGA
 CCTGCCCTCTGTGCCACTGCCATCTGAAAACTCCTCCAGCTTCCAGGATTAGGAACTAGGCCAGTTCT
 ACAGCCTCATGCTGGAGCTGAGCAAAACGTCATGTTTCAGGAAGGTAAGTGAACCCCAAGGCCAGGAGCAT
 ACTCCAGGGACCAGGATACAGGAAGGTTCCAGGGACAATAATGAGTACATTGCCAGACGACCAGATAACC
 AGGAAGGGGCTTTTGACCCCAAAGAATATCCTCACAGTGCAGAAAGATGAAGCACATCCTGTTGAATCAGC
 C

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234694 representing NM_001199382
Red=Cloning site Green=Tags(s)

MVFSKKKKKKNNMAAKEKLEAVLNVALRVPSIMLLDVLYRWDVSSFFQQIQRSSLNNPLFQYKYLAL
 NMHYVGYILSVLLTLPRQHLVQLYLFLTALLLYAGHQISRDYVRSELEFAYEGPMYLEPLSMNRFSTA
 LIGQLVCTLCSCVMKTKQIWLFSAHMLPLLARLCLVPLETIVINKFAMIFTGLEVLVFLGSLNLLVPYN
 LAKSAYRELQVVEVYGLLALGMSLWNQLVVPVLFMVFWLVLFALQIYSYFSTRDQPASRERLLFLFLTS
 IAECSTPYSLGLVFTVSFVALGVLTLCKFYLGQYRAFMNDPAMNRMTEGVTLILAVQTGLIELQVV
 HRAFLLSIILFIVVASILQSMLEIADPIVLALGASRDKSLWKHFRAVSLCLFLLVFPAYMAYMICQFFHM
 DFWLLIISSSILTSLQVLGTLFIYVLFMVEEFRKEPVENMDDVIYYVNGTYRLLFLVALCVVAYGVSE
 TIFGEWTVMGSMIIFIHSYNNVWLRALGWKSFLLRRDAVNKIKSLPIATKEQLEKHNDICAICYQDMKS
 AVITPCSHFFHAGCLKKWLTVQETCPLCHCHLNSSQLPGLGTEPVLQPHAGAEQNMVFQEGTEPPGQEH
 TPGTRIQEGSRDNNIYIARRPDNQEGAFDPKEYPHSAKDEAHPVESA

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001199382

ORF Size: 2031 bp

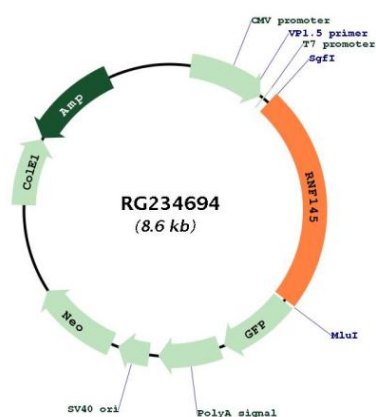
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_001199382.1, NP_001186311.1</u>
RefSeq Size:	3481 bp
RefSeq ORF:	2034 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 RG234694