

Product datasheet for **MC220270**

Rnf145 (NM_028862) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Rnf145
Synonyms:	3732413I11Rik; TMRFI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>MC220270 representing NM_028862
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCTGCGAAGGAGAACTGGAGGCAGTCTGAACGTGGCCTTGAGGGTGCCAAGCATCATGCTGCTGG
 ATGTCTTTACCGCTGGGACGTCACTCTCTTTTCCAGCAGATCCAAAGAAGCAGCCTCAACAACAACCC
 TCTTTTCCAGTACAACTACTTGGCTCTTAATATGCATTACGTAGGTTATATCTTAAGTGCTGCTGCTCCTC
 ACTCTGCCCAGGCAGCATCTGGTGCAGCTCTATTTGTATTTGTGACTGCCCTGCTCCTCTATGCTGGAC
 ATCAGATATCCAGGACTACGTAAGGAGTGAAGTGGAGTCTGCCTATGAAGGACCAATGTATTTAGAACC
 TCTCTCCATGAACCGCTTTACCACAGCCTTAATAGGTCAGTTAGTGGTGTGCACCTTGTGCTCCTGCGTT
 ATGAAGACGAAAGCAGATCTGGCTCTTCTCGGCACACATGCTTCCTCTGCTGGCTCGCCTCTGCTCGTTC
 CTCTGGAGACCATCGTCATCATCAACAAATTTGCTATGATTTTTACAGGATTGGAAGTCCTGTACTTCTCT
 AGGGTCTAATCTCTAGTACCGTATAACCTCGTAAGTCTGCATACCGGAGTTAGTTCAGGTAGTGGAG
 GTGTACGGCCTTCTGGCCTTGGGAATGTCCCTGTGGAACCAGCTGGTGGTGGCCGTGCTCTTCATGGTCT
 TCTGGCTTGTATTTATTTGCTCTTCAGATCTACTCTACTTCAAGCAGAGATCAGCCTGCATCCCGGGA
 GAGGCTTCTCTCTTTTCTGACAAGCATCGCCGAGTGTGTCAGCAGCCCTACTCCCTTCTGGGCTTG
 GTCTTACCGTGTCTTTGTTGCTTGGGTGTTCTGACACTCTGTAAGTTCTACCTGCAGGATACCGAG
 CCTTCATGAACGATCCTGCCATGAATAGGGGATGACAGAAGGAGTCACTCTGCTGATCCTGGCGGTGCA
 GACGGGCTCATAGAATTCTAGGTGGTTCACCGTGCATTCTGCTCAGCATCATCCTCTTCATCGTCGTT
 GCCTCTATCTGCAGTCCATGTTGGAGATCGCAGATCCCATGTTTGGCACTGGGAGCATCGAGAGACA
 AGAGTTTGTGGAACACTTCCGTGCTGTGAGCCTCTGCTTGTCTCTCTGCTGTTCCCTGCGTATATGGC
 CTACATGATTTGCCAGTCTTCCACATGGACTTCTGGCTTCTCATCATCATCTCCAGCAGCATCCTTACC
 TCTCTCCAGGTTCTGGGAACACTTTTTATTTACGTCTTATTTATGGTTGAGGAATCCGCAAGAGCCCCG
 TGGAAACATGGATGACGTCACTACTACGTGAATGGCACTATCGTCTGCTGGAGTTTGTGTGGCCCT
 CTGTGTGGTGGCTACGGCTCTCAGAGACCATCTTTGGAGAGTGGAGTGTGATGGGCTCCATGATCATC
 TTCATCCATTCTACTACAACGTGTGGCTTCGTGCCAGCTGGGCTGGAAGAGTTTCTTCTGCGCAGGG
 ACGCTGTGAATAAGATTAAGTCTCTCCCTGTGCGACGAGGAGCAGCTGGAGAAAACAACGACATCTG
 CGCCATCTGTTACCAGGACATGAAATCCGTGTGATCACACCTTGAGTCATTTCTTCCATCGAGGATGT
 CTTAAGAAATGGTGTATGTCCAGGATACCTGCCCTCTGTGCTACTGCCATCTCAAAAACCTCCCAGC
 TTCCAGGACTGGGGACAGAAGCGGCTCCACAGCCTCCTGCGGGGGCCGAGCAGAACATTGTACTTCAAGG
 AGGTCTGAACCCCGGACCATGAGAGTCCACAGGAGTGGGACCCAGGAAGGTTCTGGGGACAGTAGT
 GAACACATCAACAGAGGCTCGGCTAGCCAGGAGGGGCTGCTGATGCTGGAGAGGGTCTCAGATTCAG
 AAGGCGAAGTGTCTGTTGAGTCTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_028862

Insert Size:

1992 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_028862.3, NP_083138.2</u>
RefSeq Size:	3584 bp
RefSeq ORF:	1992 bp
Locus ID:	74315
UniProt ID:	<u>Q5SWK7</u>
Cytogenetics:	11 B1.1
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 (PubMed:26194095). 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 (PubMed:29374057). 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 (PubMed:29068315). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) encodes the longer isoform (1).