

## **Product datasheet for MC226125**

## Rangrf (NM 001285443) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Rangrf (NM\_001285443) Mouse Untagged Clone

Tag: Tag Free Symbol: Rangrf

Synonyms: 2400006H24Rik; Mog1; Rangnrf

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

Cell Selection: Neomycin

Fully Sequenced ORF: >MC226125 representing NM\_001285443

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001285443

**Insert Size:** 549 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).



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## Rangrf (NM\_001285443) Mouse Untagged Clone - MC226125

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

**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 001285443.1</u>, <u>NP 001272372.1</u>

RefSeq Size: 836 bp
RefSeq ORF: 549 bp
Locus ID: 57785
UniProt ID: Q9||B0
Cytogenetics: 11 B3

**Gene Summary:** May regulate the intracellular trafficking of RAN (PubMed:10811801, PubMed:11733047).

Promotes guanine nucleotide release from RAN and inhibits binding of new GTP by

preventing the binding of the RAN guanine nucleotide exchange factor RCC1

(PubMed:10811801, PubMed:11733047). Regulates the levels of GTP-bound RAN in the nucleus, and thereby plays a role in the regulation of RAN-dependent mitotic spindle dynamics (By similarity). Enhances the expression of SCN5A at the cell membrane in cardiomyocytes (PubMed:18184654, PubMed:23420830).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (4) differs in the 5' UTR and coding sequence and uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (4) has a shorter and distinct N-terminus and lacks an alternate internal

segment compared to isoform 1.