

Product datasheet for MR201721

Rangrf (NM_021329) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rangrf (NM_021329) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Rangrf
Synonyms: 2400006H24Rik; Mog1; Rangnrf
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201721 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCAACAGAACTGTCCACTGTTCCGAGGCGCCTTCTCCGCCATCCTCCCTACAGGGGCCATTG
ATGTGAGTGACCTCCGACCGGTGCCAGACAACCAAGAAGTTTTCTGCCATCCTGTGACCGACCAGAGTCT
GATCATAGAACTTCTGGAGCTGCAGGCCACGTGCAGGGCGAAGCGGCTGCGCGGTACCATTTTGAGGAC
GTTGGCCGGTGCAGGGGCTAGGGCTGTGCACGTGCTATCTGTGCAGCCTCTCTGTTTGGAGAACTTAT
CCCTGAGAGGCTGCTGTCAGGATGCCTGGTCCCTTCTGGCAAGCAGCAGGTAGCTAAAGAAAACCAGCA
GGTAGCAAAGGATGTCACACTGCATCAGGCCTTGCTGCGGCTGCCCCAGTATCAGACTGATCTTTTGCTC
ACCTTCAATCAGCCCCGTGTCACAGCAGGTCTCTGGCCCTGAAAATCTGTCATGTCCACCTTGGAGCC
TGAGTAACTTTGAACAGCTGGTAACTAGTTGACTCTTCATGATCCCAACCTCTTTGGTCCCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201721 protein sequence
Red=Cloning site Green=Tags(s)

MEPNRNCPLFGGAFSAILPTGAIDVSDLRPVPDNQEVFCHPVTQSLIIELLELQAHVQGEAAARYHFED
VGRVQGARAVHVLVSVQLCLENLSLRGCCQDAWSLSGKQQVAKENQQVAKDVTLHQALLRLPQYQTDLLL
TFNQPPCHSRSLGPENLSCPPWSLSNFEQLVTSLLHDPNLFQPQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_021329

ORF Size: 558 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_021329.3](#)

RefSeq Size: 845 bp

RefSeq ORF: 558 bp

Locus ID: 57785

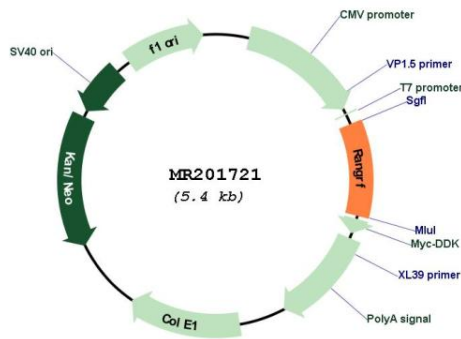
UniProt ID: [Q9JIB0](#)

Cytogenetics: 11 B3

MW: 20.4 kDa

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]

Product images:



Circular map for MR201721