

## Product datasheet for MR201880

### Rab22a (NM\_024436) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rab22a (NM\_024436) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rab22a  
**Synonyms:** 3732413A17Rik; AI662177; AW319644; AW550514; E130120E14Rik; Rab22  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201880 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCTGAGGGAACCTAAAGTGTGCCTGCTCGGGGATACGGGTGTGGGTAATCGAGCATCGTGTGGC  
GGTTTGTGGAAGACAGTTTTGATCCGAATATCAATCCAACCATAGGGGCATCTTTTATGACCAAGACTGT  
CCAGTACCAAAATGAGCTACATAAATTCCTAATCTGGGATACAGCTGGACAAGAACGATTCGTGCATTG  
GCACCAATGTACTATCGAGGGTCAGCAGCAGCCATCATCGTTTACGACATCACAAAAGAAGAGACGTTTT  
CAACTCTGAAGAACTGGGTGAGAGAGCTCCGCCAGCACGGCCCCCAGCATTGTCGTTGCCATCGCAGG  
GAACAAGTGCATCTTACTGATGTCAGAGAAGTCATGGAGAGAGATGCTAAGGACTACGCAGATTCCATT  
CATGCCATCTTTGTAGAGACCAGCGCAAAAAATGCAATAAACATAAATGAACTCTTTATAGAAATTAGTC  
GAAGAATCCATCCACTGATGCCAACCCAGCGTCTGGCGCAAGGGCTTCAAACCTCCAAGACAGCCATC  
GGAGCCAAAGCGAAGCTGCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201880 protein sequence  
Red=Cloning site Green=Tags(s)

MALRELKVCLLDGTVGKSSIVWRFVEDSFDPNINPTIGASFMTKTVQYQNELHKFLIWDTAGQERFRAL  
APMYRGSAAAIIVYDITKEETFSTLKNWVRELQHGPPSIVVAIAGNKCDLTDVREVMERDAKDYADSI  
HAIFVETSAKNAININELFIEISRRIPSTDANPASGGKGFKLRRQPSEPKRSCC

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_024436

ORF Size: 585 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\\_024436.3](#)

RefSeq Size: 1909 bp

RefSeq ORF: 585 bp

Locus ID: 19334

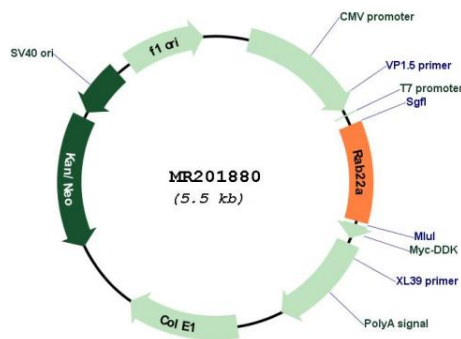
UniProt ID: [P35285](#)

**Cytogenetics:** 2 97.26 cM

**MW:** 21.8 kDa

**Gene Summary:** Plays a role in endocytosis and intracellular protein transport (PubMed:19759177, PubMed:27718357). Mediates trafficking of TF from early endosomes to recycling endosomes. Required for NGF-mediated endocytosis of NTRK1, and subsequent neurite outgrowth. Binds GTP and GDP and has low GTPase activity. Alternates between a GTP-bound active form and a GDP-bound inactive form (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR201880