

Product datasheet for **MG201918**

1500003O03Rik (BC054733) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: TurboGFP
Symbol: 1500003O03Rik
Synonyms: Sid470p, Chp, Cahp
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG201918 representing BC054733
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGTCTCGGGCCTCCACGTTATTGCGGGACGAAGAGCTCGAGGAGATCAAGAAGGAGACTGGCTTTT
CCCACAGTCAGATCACGCGCCTGTACAGCCGCTTACCAGCCTGGACAAAGGGGAGAACGGGACTCTCAG
CCGGGAAGATTTCCAGAGGATCCAGAACTTGCCATCAACCCACTGGGGGACCGGATCATCAATGCCTTC
TTCTCAGAGGGAGAGGATCAGGTAACCTCCGAGGATTCATGAGAACATTGGCTCATTTCCGACCCATTG
AGGATAACGAAAAGAGCAAAGATGTGAATGGCCCGAAACCCCTCAACAGCCGGAGCAACAAGCTGCACTT
TGCTTTCAGACTCTATGATTTGGATAAAGATGACAAGATCTCCCGTGATGAGCTGTTACAGGTAAGTGC
ATGATGGTTGGAGTGAATATCTCGGATGAGCAGCTGGCAGTATTGCGGACAGGACCATCCAGGAGGCTG
ACCAAGATGGAGATAGTCCATATCTTTACAGAATTCGTTAAGGTTTTGGAAAAGTGATGTAGAACA
GAAGATGAGCATCCGATTTCTTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201918 representing BC054733
Red=Cloning site Green=Tags(s)

MGSRASTLLRDEELEEEIKKETGFSHSQITRLYSRFTSLDKGENGLSREDFQRIPELAINPLGDRINAF
FSEGEDQVNFGRFMRTLAFHRPIEDNEKSKDVNGPEPLNSRSNKLHFAFRLYDLKDDKISRDELLQVLR
MMVGVNISDEQLGSIADRTIQEADQDGSASISFTEFVKVLEKVDVEQKMSIRFLH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: BC054733

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [BC054733](#), [AAH54733](#)

RefSeq Size: 2536 bp

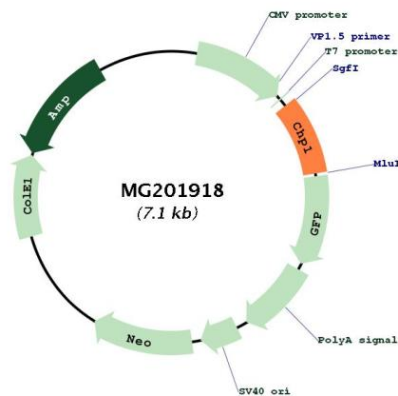
RefSeq ORF: 587 bp

Locus ID: 56398

Cytogenetics: 2 E5

Gene Summary: Calcium-binding protein involved in different processes such as regulation of vesicular trafficking, plasma membrane Na(+)/H(+) exchanger and gene transcription. Involved in the constitutive exocytic membrane traffic. Mediates the association between microtubules and membrane-bound organelles of the endoplasmic reticulum and Golgi apparatus and is also required for the targeting and fusion of transcytotic vesicles (TCV) with the plasma membrane. Functions as an integral cofactor in cell pH regulation by controlling plasma membrane-type Na(+)/H(+) exchange activity. Affects the pH sensitivity of SLC9A1/NHE1 by increasing its sensitivity at acidic pH. Required for the stabilization and localization of SLC9A1/NHE1 at the plasma membranes. Inhibits serum- and GTPase-stimulated Na(+)/H(+) exchange. Plays a role as an inhibitor of ribosomal RNA transcription by repressing the nucleolar UBF1 transcriptional activity. May sequester UBF1 in the nucleoplasm and limit its translocation to the nucleolus. Associates to the ribosomal gene promoter. Acts as a negative regulator of the calcineurin/NFAT signaling pathway. Inhibits NFAT nuclear translocation and transcriptional activity by suppressing the calcium-dependent calcineurin phosphatase activity. Also negatively regulates the kinase activity of the apoptosis-induced kinase STK17B. Inhibits both STK17B auto- and substrate-phosphorylations in a calcium-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG201918