

## Product datasheet for MR201918

### Chp1 (NM\_019769) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Chp1 (NM\_019769) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Chp1  
**Synonyms:** 1500003O03Rik; AA960066; AI046351; Cahp; Chp; p24; Sid470p; vac  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201918 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGTCTCGGGCTCCACGTTATTGCGGGACGAAGAGCTCGAGGAGATCAAGAAGGAGACTGGCTTTT  
 CCCACAGTCAGATCACGCGCCTGTACAGCCGCTTACCAGCCTGGACAAAGGGGAGAACGGGACTCTCAG  
 CCGGGAAGATTTCCAGAGGATCCAGAACTGCCATCAACCCACTGGGGACCGGATCATCAATGCCTTC  
 TTCTCAGAGGGAGAGGATCAGGTAACCTCCGAGGATTCATGAGAACATTGGCTCATTTCCGACCCATTG  
 AGGATAACGAAAAGAGCAAAGATGTGAATGGCCCGGAACCCCTCAACAGCCGGAGCAACAAGCTGCACTT  
 TGCTTTCAGACTCTATGATTTGGATAAAGATGACAAGATCTCCCGTGATGAGCTGTTACAGTACTGCGA  
 ATGATGGTTGGAGTGAATATCTCGGATGAGCAGCTGGGCAGTATTGCGGACAGGACCATCCAGGAGGCTG  
 ACCAAGATGGAGATAGTGCCATATCTTTACAGAATTCGTTAAGGTTTTGGAAAAAGTGGATGTAGAACA  
 GAAGATGAGCATCCGATTTCTTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201918 protein sequence  
 Red=Cloning site Green=Tags(s)

MGSRASTLLRDEELEEKKETGFSSHSQITRLYSRFTSLDKGENGTL SREDFQRIPELAINPLGDRINAF  
 FSEGEDQVNFGRFMRTL AHFRPIEDNEKSKDVNGPEPLNSRSNKLHFAFRLYDLKDDKISRDELLQVLR  
 MMVGVNISDEQLGSIADRTIQEADQDGDSAISFTEFVKVLEKVDVEQKMSIRFLH

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_019769

**ORF Size:** 588 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\\_019769.3](#), [NP\\_062743.1](#)

**RefSeq Size:** 2626 bp

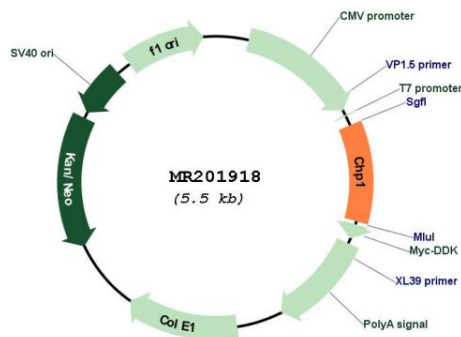
**RefSeq ORF:** 588 bp

**Locus ID:** 56398

**UniProt ID:** [P61022](#)

Cytogenetics:	2 E5
MW:	22.4 kDa
Gene Summary:	<p>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]</p>

### Product images:



Circular map for MR201918