

## Product datasheet for **MG20211**

### Chmp1b (NM\_024190) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Chmp1b (NM\_024190) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Chmp1b  
**Synonyms:** 281040511Rik; Chmp1b1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG20211 representing NM\_024190  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCAACATGGAGAAGCATCTGTTCAACCTGAAATTCGCGCCAAAGAAGTGAACCGGAGTCCAAAA  
 AATGCGACAAGGAAGAAAAGGCCGAAAAGGCCAAAATTAAGGCCATTCAGAAGGGCAACATGGAAGT  
 TGCGAGGATTCACGCCGAAAATGCCATCCGCCAGAAGAATCAAGGGTGAACCTTTGAGAATGAGTGCA  
 CGAGTGGATGCGGTGGCGCCCGTGTCCAGACTGCAGTGCAGATGGGCAAAGTGACCAAGTCCATGGCGG  
 GTGTGGTTAAGTCGATGGACGCGACGTTGAAAAGTATGAATCTGGAGAAGATCTCCGCTTTGATGGACAA  
 ATTCGAACACCAGTTCGAGACTCTGGACGTCAGACGCAGCAAATGGAAGACACAATGAGCAGCAGCAGC  
 ACGCTGACCACTCCCAGAACCGTGGATATGCTGCTCCAGGAAATGGCAGATGAGGCGGGCCTCGATC  
 TCAACATGGAGCTGCCTCAGGGCCAGACCGGTTCCGTGGGAACGAGCGTGGCTTCGGCTGAGCAAGATGA  
 ACTGTCCCAGAGACTGGCCCGCCTTCGGGATCAAGTC

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG20211 representing NM\_024190  
 Red=Cloning site Green=Tags(s)

MSNMEKHLFNLKFAAKELNRSSKKCDKEEKAIEKAIKKAIQKGNMEVARIHAENAIRQKNQGVNFLRMSA  
 RVDAAVARVQTAVTMGKVTSMAGVVKSMDATLKSMLNLEKISALMDKFEHQFETLDVQTQQMEDTMSSTT  
 TLTPPNQVDMLLQEMADEAGLDLNMELPQGQTSVGSVTSVASAEQDELSQRLARLRDQV

**TRTRPLE** - GFP Tag - V

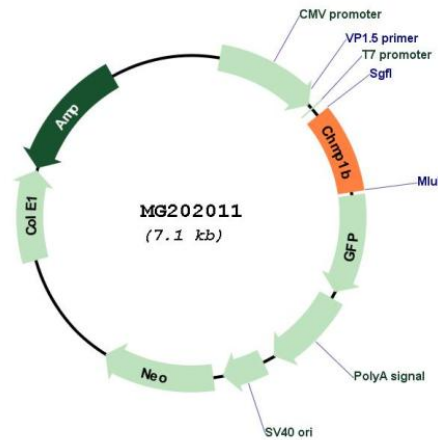
**Restriction Sites:** SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM\_024190

ORF Size: 597 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\\_024190.2](#), [NP\\_077152.1](#)

**RefSeq Size:** 1601 bp

**RefSeq ORF:** 600 bp

**Locus ID:** 67064

**UniProt ID:** [Q99LU0](#)

**Cytogenetics:** 18 E1

**Gene Summary:** Probable peripherally associated component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. The MVB pathway appears to require the sequential function of ESCRT-O, -I, -II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis. ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4. Involved in cytokinesis. Involved in recruiting VPS4A and/or VPS4B and SPAST to the midbody of dividing cells (By similarity).[UniProtKB/Swiss-Prot Function]