

## Product datasheet for **RN211120**

### Chmp4c (NM\_001017466) Rat Untagged Clone

#### Product data:

Product Type: Expression Plasmids

Product Name: Chmp4c (NM\_001017466) Rat Untagged Clone

Tag: Tag Free

Symbol: Chmp4c

Synonyms: MGC108776

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >RN211120 representing NM\_001017466  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGAGCAAGTTGGCAAGTTTTTCAAAGGGTCTCGCTCTTCTCGGGCCCGCGGGCTCCAGCGCTCAGG  
AAGCCCTGGCTCGACTCCGGGAGACCGAGGAGATGATGGCCAAGAAGCAGGAGTACCTGGAGAACCGAAT  
CCAGAGGGAGCTTGCTCTAGCCAAGAAGCACGGCTCCAGAACAAGCGAGCTGCCTTGACGGCACTGAAA  
AGAAAGAAGAGATTTGAGAAGCAGCTCACACAGATTGACGGCACCCCTTCCACCATTGAGTTCAGCGGG  
AGGCGCTAGAGAACTCACACACCAACACTGAGGTCTTACGGAACATGGGCTTCGCAGCCAAGGCCATGAA  
AGCTGTTTCATGAAAACATGGATCTCAACAAAATCGATGACTTGATGCAAGACATCACAGAGCAGCAGGAC  
ATTGCCAGGAAATCTCAGAAGCGTTTTCTCAAAGAGTTCACTTTGCTGATGGCTTCGATGAGGATGAGC  
TTCTGGCGGAGCTCGAGGAAGTGGAGCAGGAAGAATTAATAAGAAGATGACAAGCATGGAGCTCCCAAA  
TGTGCCTTCCTCATCCCTCCCAGCACAGCCAGCAGGAAGGCCGGCGTGCCTTCTCTGTGCACCGCTCT  
CGAGCAGCATCTCCAGGAGGCGAGGAAGATGATGACTTCAAGCAGCTGGCAGCCTGGGCCACT**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM\_001017466

Insert Size: 699 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_001017466.2, NP_001017466.2</u>
<b>RefSeq Size:</b>	1616 bp
<b>RefSeq ORF:</b>	699 bp
<b>Locus ID:</b>	361916
<b>UniProt ID:</b>	<u>Q569C1</u>
<b>Cytogenetics:</b>	2q23
<b>Gene Summary:</b>	<p>Probable core 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. Key component of the cytokinesis checkpoint, a process required to delay abscission to prevent both premature resolution of intercellular chromosome bridges and accumulation of DNA damage: upon phosphorylation by AURKB, together with ZFYVE19/ANCHR, retains abscission-competent VPS4 (VPS4A and/or VPS4B) at the midbody ring until abscission checkpoint signaling is terminated at late cytokinesis. Deactivation of AURKB results in dephosphorylation of CHMP4C followed by its dissociation from ANCHR and VPS4 and subsequent abscission. ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4. CHMP4A/B/C are required for the exosomal release of SDCBP, CD63 and syndecan (By similarity).[UniProtKB/Swiss-Prot Function]</p>