

## Product datasheet for RR211120L3V

## OriGene Technologies, Inc.

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## Chmp4c (NM\_001017466) Rat Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Chmp4c (NM\_001017466) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Chmp4c

Synonyms: MGC108776

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001017466

ORF Size: 696 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RR211120).

Sequence:

**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.

**RefSeg:** NM 001017466.2, NP 001017466.2

RefSeq Size: 1616 bp
RefSeq ORF: 699 bp
Locus ID: 361916
UniProt ID: Q569C1

Cytogenetics: 2q23







**Gene Summary:** 

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]