

Product datasheet for RC222002

CHMP4A (NM_014169) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHMP4A (NM_014169) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHMP4A
Synonyms:	C14orf123; CHMP4; CHMP4B; HSPC134; SHAX2; SNF7; SNF7-1; VPS32-1; VPS32A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222002 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGCGGGCGGCCCTGAGGACGGATTGGCAAGGCTGGTCCCTGTGTGATGAGACATCACCCCTCCA
GGAGCAAGGCGGAAGTCTGGAGGACGCTGAGGGCGGAGGCGGGAGAGGCGAGCTCGCGATGAGTGGTCT
CGGCAGGCTCTTCGGGAAGGGGAAGAAGGAGAAAGGGCCAACCCCTGAAGAAGCAATACAGAACTGAAG
GAGACAGAGAAGATACTGATCAAGAAACAGGAATTTTTGGAGCAGAAGATTCAACAGGAGCTACAAACAG
CCAAGAAGTATGGACCAAGAATAAGAGAGCTGCCCTACAGGCTTTCGCGAGGAAGAAAAGATTGGAACA
GCAGCTGGCACAACCTGACGGGACATTATCCACCCTGGAGTTTCAGCGTGAGGCCATTGAGAATGCCACT
ACCAATGCAGAAGTCCTTCGTACCATGGAGCTTGCTGCCCAAAGCATGAAGAAGGCTACCAGGACATGG
ACATTGACAAGGTAGATGAACTGATGACTGACATCACGGAACAACAGGAGGTGGCCAGCAGATCTCAGA
TGCCATTTCTCGGCCTATGGGCTTTGGAGATGATGTGGATGAGGATGAACTGCTGGAGGAGCTAGAGGAG
CTGGAGCAGGAGGAATTGGCCAGGAGTTGTTAAATGTGGGCGACAAGGAAGAAGAACCCTCAGTCAAAAT
TGCTAGTGTACCTTCTACTCATCTGCCGCGAGGCCAGCTCCCAAAGTGGATGAAGATGAAGAAGCACT
AAAGCAGTTGGCTGAGTGGGTATCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222002 protein sequence
Red=Cloning site Green=Tags(s)

MSRRRPEDGLGKAGPCVMRHPPRSKAEVWRTL RGGGGRGELAMSGLGR LFGKGGKKEGPTPEEAIQKLK
 ETEKILIKKQEFLEQKIQQELQTAKKYGTKNKRAALQALRRKKRFEQQLAQTDGTLSTLEFQREAIENAT
 TNAEVLRTMELAAQSMKKAYQDMDIDKVDELMTDITEQQEVAQQISDAISRPMGFDDVDEDELLEEELE
 LEQEELAQELLNVGDKEEESVKLPSVSPSTHLPAGPAPKVDDEEALKQLAEWVS

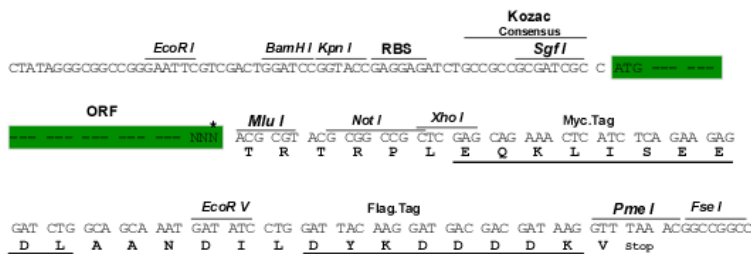
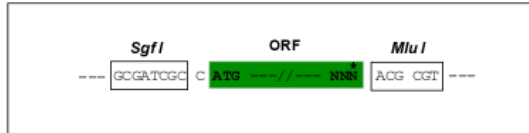
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6609_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_014169

ORF Size: 795 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_014169.3](#), [NP_054888.2](#)

RefSeq Size: 1372 bp

RefSeq ORF: 669 bp

Locus ID: 29082

UniProt ID: [Q9BY43](#)

Cytogenetics: 14q12

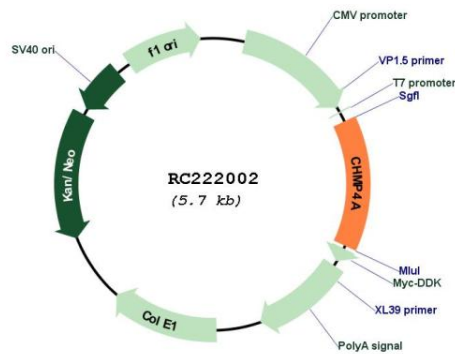
Domains: DUF279

Protein Pathways: Endocytosis

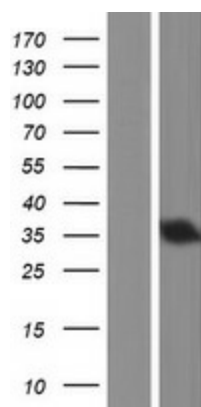
MW: 29.8 kDa

Gene Summary: CHMP4A belongs to the chromatin-modifying protein/charged multivesicular body protein (CHMP) family. These proteins are components of ESCRT-III (endosomal sorting complex required for transport III), a complex involved in degradation of surface receptor proteins and formation of endocytic multivesicular bodies (MVBs). Some CHMPs have both nuclear and cytoplasmic/vesicular distributions, and one such CHMP, CHMP1A (MIM 164010), is required for both MVB formation and regulation of cell cycle progression (Tsang et al., 2006 [PubMed 16730941]).[supplied by OMIM, Mar 2008]

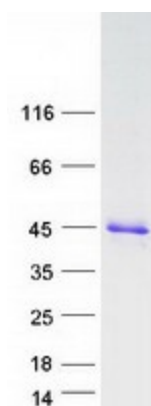
Product images:



Circular map for RC222002



Western blot validation of overexpression lysate (Cat# [LY415459]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222002 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CHMP4A protein (Cat# [TP322002]). The protein was produced from HEK293T cells transfected with CHMP4A cDNA clone (Cat# RC222002) using MegaTran 2.0 (Cat# [TT210002]).