

## Product datasheet for **RC208099**

### VPS4A (NM\_013245) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VPS4A (NM_013245) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VPS4A
Synonyms:	CIMDAG; SKD1; SKD1A; SKD2; VPS4; VPS4-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208099 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACAACGTCAACCCTCCAGAAAGCCATTGATCTGGTGACGAAAGCCACAGAGGAGGACAAAGCCAAGA  
 ACTACGAGGAGGCGCTGCGGCTGTACCAGCATGCGGTGGAGTACTTCTCCACGCTATCAAGTATGAGGC  
 CCACAGCGACAAGGCCAAGGAGAGCATTGAGCCAAGTGCCTGACAGTACCTAGACCGGGCCGAGAAGCTG  
 AAGGATTATTTACGAAGCAAAGAGAAACACGGCAAGAAGCCAGTCAAAGAGAACCAGAGTGAAGGCAAGG  
 GCAGTGACAGTGACAGTGAAGGGGATAATCCGGAGAAAAAGAACTGCAAGAACAGCTGATGGGTGCCGT  
 CGTGATGGAGAAGCCCAACATACGGTGGAAACGACGTGGCCGGGCTGGAGGGGGCCAAAGGAGGCCCTCAA  
 GAAGCTGTCATTTTGCCAATCAAATCCACACTGTTCACAGGCAAGCGCACCCCTGGCGGGGATTCT  
 TGCTGTTCCGACCCCTGGCACAGGAAATCCTACCTGGCCAAAGCCGTGGCAACAGAGGCCAACAACTC  
 CACCTTCTTCTGTGTCTCTCAGATCTGATGTCCAAGTGGCTGGGGGAGAGTAAAAAGCTGGTCAAG  
 AACCTGTTTGGAGCTGGCCAGGCAGCACAAAGCCCTCCATCATCTTCATCGATGAGGTGGATTCCCTCTGCG  
 GGTCCCGAAATGAAAATGAGAGTGAAGGCGCCCGGAGGATCAAAACGGAGTTCTTGGTCCAGATGCAGGG  
 GGTGGGAATAACAATGATGGGACTCTGGTTCTTGGAGCCACAAACATCCCATGGGTGTTGGATTGCGCC  
 ATCAGGAGGAGGTTTGA AAAACGAATTTATATCCCTTGGCCGGAGGAAGCTGCCCGCCAGATGTTCC  
 GGTGTCATCTCGGGAGCACTCCCAACCTCACGGATGCAAACATCCACGAGCTGGCCCGGAAGACGGA  
 AGGCTACTCGGGCGGGACATCAGCATCATCGTGCGGGACTCTCATGCAGCCCGTGAAGGAGTGCAG  
 TCGGCCACACACTTAAAAAGGTCTGTGGCCCTCTCGCACCAACCCAGCATGATGATTGATGACCTCC  
 TGACTCCATGCTACCAGGGGACCCAGGAGCCATGGAGATGACTTGGATGGATGTCCCTGGGGACAACT  
 CTTAGAGCCTGTGGTTTGCATGTCGGACATGCTGCGGTCTCTGGCCACCACCCGGCCACGGTGAATGCA  
 GACGACCTCTGAAAGTGAAGAAATTCTCAGAGGACTTTGGCAAGAGAGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208099 protein sequence  
 Red=Cloning site Green=Tags(s)

MTTSTLQKAIDLVTKATEEDKAKNYEEALRLYQHAVEYFLHAIKYEAHSDKAKESIRAKCVQYLDRAEKL  
 KDYLRSKEKHGKPKVKENQSEKGSDDSEGDNPEKKLQEQLMGAVVMEKPNIRWNDVAGLEGAKEALK  
 EAVILPIKPHLFTGKRPWRGILLFGPPGTGKSYLAKAVATEANNSTFFSVSSDLMSKWLGESEKLVK  
 NLFELARQHKPSIIFIDEVDSLCSRNESEAAARRIKTEFLVQMVGNNNDGTLVLGATNIPWVLD  
 IRRRFEKRIYIPLPEEAARAQMFRHLHGSTPHNLTDANIHELARKTEGYSGADISIIVRDSLMPVRKVQ  
 SATHFKKVCGPSRTNPSMIDDLLTPCSPGDPGAMEMTWMDVPGDKLLEPVVCMSDMLRSLATTRPTVNA  
 DDLKVKKFSDFGQES

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6726\\_e06.zip](https://cdn.origene.com/chromatograms/mk6726_e06.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**ACCN:** NM\_013245

**ORF Size:** 1311 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\\_013245.3](#)
**RefSeq Size:** 2211 bp

**RefSeq ORF:** 1314 bp

**Locus ID:** 27183

**UniProt ID:** [Q9UN37](#)
**Cytogenetics:** 16q22.1

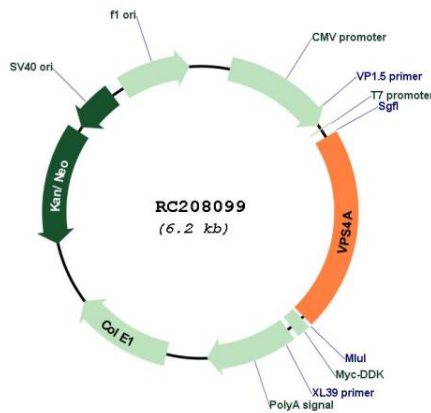
**Domains:** AAA, AAA, MIT

**Protein Pathways:** Endocytosis

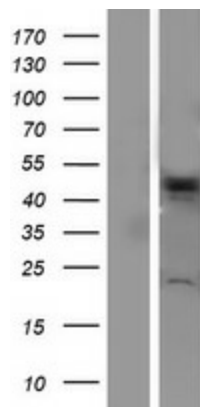
**MW:** 48.9 kDa

**Gene Summary:** The protein encoded by this gene is a member of the AAA protein family (ATPases associated with diverse cellular activities), and is the homolog of the yeast Vps4 protein. In humans, two paralogs of the yeast protein have been identified. The former share a high degree of aa sequence similarity with each other, and also with yeast Vps4 and mouse Skd1 proteins. The mouse Skd1 (suppressor of K<sup>+</sup> transport defect 1) has been shown to be really an yeast Vps4 ortholog. Functional studies indicate that both human paralogs associate with the endosomal compartments, and are involved in intracellular protein trafficking, similar to Vps4 protein in yeast. The gene encoding this paralog has been mapped to chromosome 16; the gene for the other resides on chromosome 18. [provided by RefSeq, Jul 2008]

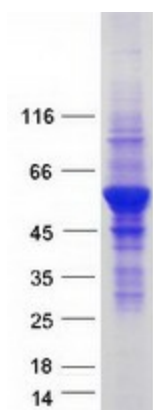
**Product images:**



Circular map for RC208099



Western blot validation of overexpression lysate (Cat# [LY415707]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208099 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VPS4A protein (Cat# [TP308099]). The protein was produced from HEK293T cells transfected with VPS4A cDNA clone (Cat# RC208099) using MegaTran 2.0 (Cat# [TT210002]).