

## Product datasheet for **RC216121**

### VPS16 (NM\_022575) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VPS16 (NM_022575) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VPS16
Synonyms:	DYT30; hVPS16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC216121 representing NM\_022575  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACTGCTACACGGCGAACTGGAACCCACTCGGGACTCTGCCTTTTACCGGAAATATGAGCTGTACA  
GCATGGACTGGGACCTGAAGGAGGAACTCAGGGATTGCCTGGTGGCTGCTGCACCCATATGGGGGCCCAT  
TGCACTGCTGAGGAACCCCTGGCGGAAGGAGAAAAGCTGCTAGTGTGAGGCCAGTGCATATATACTCT  
GCTTCCGGCATGCCTCTGGCCAGCCTGTGTGGAAGAGTGGACCCGTGGTGTCCCTGGGCTGGTCACTG  
AGGAGGAGCTGCTCTGTGTGCAGGAAGATGGTGTACTGGTTTATGGGCTTCATGGTACTTCCGGAG  
ACACTTCAGCATGGGCAATGAAGTGTCCAGAACCAGGTTCTGGATGCCCGGATCTTTCACACTGAGTTT  
GGTTCCGGAGTGGCCATCCTCACAGGGGCCACCCTCACCCCTCAGTGCCAATGTGGGTGACCTCAAAC  
TCCGCCGATGCCAGAGGTGCCAGGTCTGCAAAGTGCACCCTCCTGCTGGACTGTCTGTGCCAGGACCG  
AGTGGCACACATTCTTCTGGCTGTGGGCTGACCTTTACCTCTTGACCATGCAGCCTGCTCCGCAGTG  
ACGCCCCCTGGCCTGGCCCCAGGAGTAAGCAGTTCCTACAGATGGCTGTCTCCTCACCTACCGACACC  
TGGCACTCTTACAGACACAGGCTACATCTGGATGGGGACAGCATCACTCAAGGAGAAGCTATGTGAGTT  
CAACTGCAACATCCGGGCACCTCCAAGCAGATGGTCTGGTGCAGCCGTCTCGTAGCAAGGAGAGGGCC  
GTGGTGGTGGCCTGGGAAAGGCGCTGATGGTGGTGGGCGATGCACCCGAGAGCATCCAGTTTGTCTGG  
ATGAGGACTCCTACCTGGTGCCTGAGCTCGATGGGGTCCGCATCTTCTCCCGCAGACCCACGAGTTCT  
GCATGAGGTTCCAGCGGCCAGCGAGGAAATCTTCAAAATTGCCTCAATGGCCCCGGGGCGCTGCTCCTG  
GAGGCTCAGAAGGAGTATGAGAAAGAGAGCCAGAAGGCGGACGAGTACCTGCGGGAGATCCAGGAGCTGG  
GCCAGTGACCCAGGCGCTGCAGCAGTGCATTGAGGCTGCAGGACATGAGCACCAGCCAGACATGAGAA  
GAGTCTGCTCAGGGCCGCTCCTTCGGAAGTGTTCCTGGACAGATTTCCACCCGACAGTTCGTGCAC  
ATGTGTACAGGACCTGCGTGTCTCAATGTCTGCGGACTATCACATCGGGATCCCGCTCACCTATAGCC  
AATATAAGCAGCTCACCATCCAGGTGCTGCTGGACAGGCTCGTGTGCGGAGACTTTACCCCTGGCCAT  
CCAGATATGCGAGTACTTGCCTTCTGAAGTACAGGGCGTCAGCAGGATCCTGGCCACTGGGCTGC  
TACAAGGTGCAACAGAAGGATGTCTCAGATGAGGATGTGGCTCGAGCCATTAACCAGAAGCTGGGGACA  
CGCCTGGTGTCTTACTCCGACATTGCTGCACGAGCCTATGGTGTGGCCGCACGGAGCTGGCCATCAA  
GCTGCTGGAGTATGAGCCAGCTCAGGGGAGCAGGTACCCCTTCTCTAAAGATGAAGAGGAGCAAACCTG  
GCACTAAGCAAGGCCATCGAGAGCGGGGACACTGACCTGGTGTTCACGGTGTGCTGCACCTGAAGAACG  
AGCTGAACCGAGGAGATTTTTTCATGACCTTCGGAATCAGCCATGGCCCTCAGTTTGTACCGACAGTT  
CTGTAAGCATCAGGAGCTAGAGACGCTGAAGGACCTTTACAATCAGGATGACAATCACCAGGAATTGGGC  
AGCTTCCACATCCGAGCCAGCTATGCTGCAGAAGAGCGTATTGAGGGGCGAGTAGCAGCTCTGCAGACAG  
CCGCCGATGCCTTCTACAAGGCCAAGAATGAGTTTGCAGCCAAGGCTACAGAGGATCAAATGCGGCTCCT  
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ACCACCCTCATTCTTGGCGGTCAACAACGCGTGCAGAGCAGCTGGCACGTGACTCCGCATCCCTGACA  
AGAGGCTCTGGTGGTGAAGCTGACTGCCCTGGCAGATTTGGAAGATTGGGAAGAGCTAGAGAAGTTTTTC  
CAAGGCAAGAAATCACCCATTGGCTACCTGCCTTTTGTGGAGATCTGCATGAAACAACATAACAAATAC  
GAAGCCAAGAAGTATGCTTCCCGCTGGTCCCAGCAGAAGGTAAGGCTTTGCTTCTTGTGGCGATG  
TGGCTCAGGCTGCAGATGTGGCCATCGAACCCGGAATGAGGCTGAGCTGAGCCTCGTATTGTCCCACTG  
CACGGGAGCCACAGATGGGGCCACAGCTGACAAGATTAACGGGCCAGGGCACAAGCCAGAAGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216121 representing NM\_022575  
Red=Cloning site Green=Tags(s)

MDCYTANWNPLGDSAFYRKYELYSMDWDLKEELRDCLVAAAPYGGPIALLRNPWRKEKAASVRPVLDIYS  
ASGMPLASLLWKSPPVSLGWSAEEELLCVQEDGAVLVYGLHGDFRRHF SMGNEVLQNRVLDARIFHTEF  
GSGVAILTGHRFTLSANVGDLLRRMPEVPLQSAWSCWTVLCQDRVAHILLAVGPDLYLLDHAACSAV  
TPPGLAPGVSSFLQMAVSFTYRHLALFTDTGYIWMGTASLKEKLCFNCNIRAPPKQMVWCSRPRSKERA  
VVVAWERRLMVVGDAPEIQFVLEDESYLYPELDGVRIFSRSTHEFLHEVPAASEEIFKIASMAPGALLL  
EAQKEYEKESQKADEYLREIQELGQLTQAVQQCIEAAGHEHQPDMQKSLRAASFQKFLDRFPDSFVH  
MCQDLRVLNAVRDYHIGIPLTYSQYKQLTIQVLLDRLVLRRLYPLAIQICEYLRRLPEVQGVSRILAHWAC  
YKVVQKDVSDVARAINQKLGDTGVSYSYDIAARAYGCGRTELAIKLLEYEPRSGEQVPLLLKMKRSKL  
ALSKAIESGDTDLVFTVLLHLKNELNRGDFMTLRNQPMALSLYRQFCKHQELETLDLYNQDDNHQELG  
SFHIRASYAAEERIEGRVAALQTAAAFYKAKNEFAAKATEDQMRLRLQRREDELGGQFLDLSLHDTV  
TTLILGGHNKRAEQRLARDFRIPDKRLWWLKLALADLEDWEELEKFSKSKKSPIGYLPFVEICMKQHMKY  
EAKKYASRVGPEQKVKALLLVGDVAQAADVAIEHRNEAELSLVLSHCTGATDGATADKIQRARAQAQKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6712\\_d02.zip](https://cdn.origene.com/chromatograms/mk6712_d02.zip)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_022575

ORF Size: 2517 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\\_022575.4](#)

**RefSeq Size:** 2769 bp

**RefSeq ORF:** 2520 bp

**Locus ID:** 64601

**UniProt ID:** [Q9H269](#)

**Cytogenetics:** 20p13

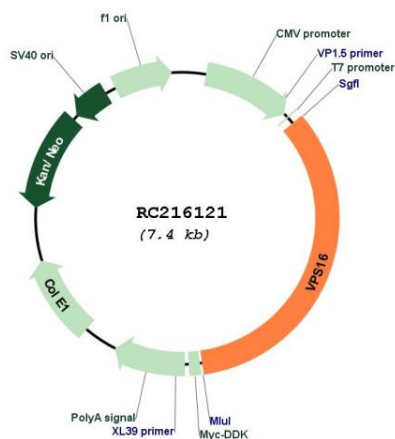
**Domains:** Vps16\_C, Vps16\_N

**Protein Families:** Druggable Genome

**MW:** 94.5 kDa

**Gene Summary:** Vesicle mediated protein sorting plays an important role in segregation of intracellular molecules into distinct organelles. Genetic studies in yeast have identified more than 40 vacuolar protein sorting (VPS) genes involved in vesicle transport to vacuoles. This gene encodes the human homolog of yeast class C Vps16 protein. The mammalian class C Vps proteins are predominantly associated with late endosomes/lysosomes, and like their yeast counterparts, may mediate vesicle trafficking steps in the endosome/lysosome pathway. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009]

### Product images:



Circular map for RC216121