

Product datasheet for **RC238285**

VPS45A (VPS45) (NM_001279355) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VPS45A (VPS45) (NM_001279355) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VPS45
Synonyms:	H1; H1VPS45; SCN5; VPS45A; VPS45B; VPS54A; VSP45; VSP45A
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC238285 representing NM_001279355
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACGTGGTTTTTGTGTGAAGCAGTACCCACATTTGTTTTCCCTCAATATTTTGGGTTGCTGCCAGG
 GTCGAAATTGGGATCCAGCCAGCTATCTAGAACAACCAAGGGCTTACAGCTCTCCTTTTATCTCTGAA
 GAAGTGTCCCATGATTCTGTTATCAGCTCTCATCAGAGGCAGCAAAGAGACTTGCAGAGTGCGTAAAGCAA
 GTGATAACTAAAGAATATGAACTGTTTGAATCCGTCGGACAGAGGTTCCCTCCATTGCTCCTATTTTAG
 ATCGCTGTGATGATGCCATCACCCATTGCTAAACCAGTGGACATATCAGGCCATGGTCCACGAACACT
 AGGCATAAACAACAATCGGATTGATCTTCCAGAGTCCCGGAATCAGTAAAGACTTAAGAGAAGTGGTC
 CTATCTGCTGAAAATGATGAATTCTATGCTAATAATATGTACCTGAACTTTGCTGAGATTGGTAGCAATA
 TAAAGAATCTCATGGAAGATTTTCAGAAGAAGAAACAAAAGAACAGAAAACTAGAATCAATAGCAGA
 CATGAAGCGCTTTGTTGAGAATTATCCACAGTTCAAGAAAATGTCTGGGACTGTTTCAAAGCATGTGACA
 GTGGTTGGAGAAGTGTCTCGATTGGTCAGTGAACGGAATCTGCTGGAGGTTTCAGAGGTTGAGCAAGAAC
 TGGCCTGTCAAAATGACCATTCTAGTGCTCTCCAGAATATAAAAAGGCTTCTGCAGAACCCAAAGTGAC
 AGAGTTTGATGCTGCCCGCTGGTATGCTTTATGCTTTACATTATGAGCGACACAGCAGCAATAGCCTG
 CCAGGACTAATGATGGACCTCAGGAATAAAGGTGTTTCTGAGAAGTATCGAAAGCTCGTGTCTGCAGTTG
 TTGAATATGGTGGTAAACGAGTCAGAGGAAGTGACCTCTTCAGCCCCAAGATGCTGTGGCTATCACAA
 ACAATTCCTCAAAGGACTGAAGGGAGTAGAAAAATGATATACACAGCATCAACCTTTCTACATGAAACC
 CTGGATCATCTCATCAAAGGAAGGCTTAAGGAAAACCTATATCCTATTTAGGCCCCAGCACACTCAGAG
 ACAGACCTCAGGATATCATTGTGTTTGTAAATTGGAGGAGCCACCTATGAAGAGGCTTAACAGTTTATAA
 CCTGAACCGCACCACTCCTGGAGTGAGGATTGTCTCTGGGAGGCACCACAGTGCACAACACGAAAAGTTTC
 CTAGAGGAAGTTCTGGCTTCTGGACTGCACAGCCGAAGCAAGGAGAGCTCTCAAGTCACATCAAGGTCAG
 CGAGCAGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238285 representing NM_001279355
 Red=Cloning site Green=Tags(s)

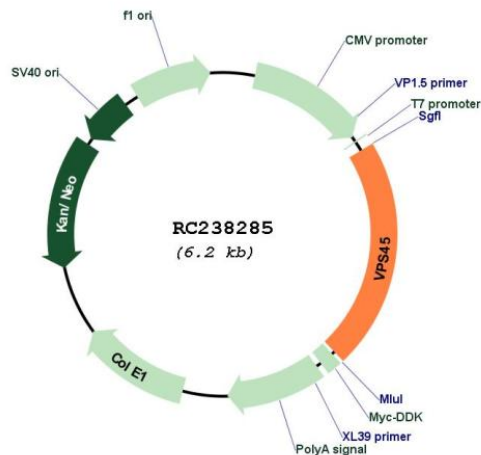
MNVVFAVKQYPHLFLSLNILGCCQGRNWDPAQLSRTTQGLTALLLSLKKCPMIRYQLSSEAAKRLAECVKQ
 VITKEYELFEFRREVPPLLLILDRCDDAITPLLNQWYQAMVHELLGINNNRIDLSRVPGISKDLREVV
 LSAENDEFYANNMYLNF AEIGSNIKNLMEDFQKKPKKEQKLES IADMKAFVENYPQFKKMSGTVSKHVT
 VVGEL SRLV SERNLLEVSEVEQELACQNDHSSALQNIKRL LQNPKVTEFDAARL VMLYALHYERHSSNSL
 PGLMMDLRNKGVSEKYRKLVS AVVEYGGKRV RGSDF SPKDAVAITKQFLKGLKGVENVYQHQPF LHET
 LDHLIKGR LKENLYPYLGPSTLRDRPQDIIVFVIGGATYEEAL TVYNLNRTPGV RIVLGGTTVHNTKSF
 LEEVLASGLHSRSKES SQVTSRSASRR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001279355

ORF Size: 1341 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_001279355.1](#), [NP_001266284.1](#)

RefSeq Size: 2080 bp

RefSeq ORF: 1344 bp

Locus ID: 11311

Cytogenetics: 1q21.2

Protein Pathways: Endocytosis

MW: 51.2 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 is a member of the Sec1 domain family, and shows a high degree of sequence similarity to mouse, rat and yeast Vps45. The exact function of this gene is not known, but its high expression in peripheral blood mononuclear cells suggests a role in trafficking proteins, including inflammatory mediators. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2013]