

Product datasheet for **SC115621**

VPS45A (VPS45) (NM_007259) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VPS45A (VPS45) (NM_007259) Human Untagged Clone
Tag:	Tag Free
Symbol:	VPS45A
Synonyms:	H1; H1VPS45; SCN5; VPS45A; VPS45B; VPS54A; VSP45; VSP45A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC115621 sequence for NM_007259 edited (data generated by NextGen Sequencing)

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ATGAACGTGGTTTTGCTGTGAAGCAGTACATTTCCAAAATGATAGAGGACAGCGGGCCT
GGTATGAAAGTACTTCTCATGGATAAAGAGACGACTGGCATAGTGAGTATGGTATACACA
CAATCGGAGATTCTACAGAAGGAAGTGTACCTCTTGAACGCATTGATTCTAAAATCGA
GAGATCATGAAACACCTGAAGGCAATTTGTTTTCTCGACCTACAAAGGAGAATGTGGAT
TATATTATTCAGGAGCTCCGAAGACCCAAATACACTATATATTTTCAATTTATTTTCAGTAAT
GTGATCAGCAAGAGTGACGTGAAGTCATTGGCTGAAGCTGATGAACAGGAAGTTGTGGCT
GAGGTTACAGGAATTTTATGGTGATTACATTGCTGTGAACCCACATTTGTTTTCCCTCAAT
ATTTTGGGTTGCTGCCAGGGTCGAAATTGGGATCCAGCCCAGCTATCTAGAACAACCTCAA
GGGCTTACAGCTCTCCTTTTATCTCTGAAGAAGTGTCCCATGATTCGTTATCAGCTCTCA
TCAGAGGCAGCAAAGAGACTTGCAGAGTGCCTAAGCAAGTGATAACTAAAGAATATGAA
CTGTTTGAATTCGTCGGACAGAGGTTCCCTCATTGCTCCTTATTTTAGATCGCTGTGAT
GATGCCATCACCCATTGCTAAACCAGTGGACATATCAGGCCATGGTCCACGAACTACTA
GGCATAAACAACAATCGGATTGATCTTTCCAGAGTGCCGGGAATCAGTAAAGACTTAAGA
GAAGTGGTCTATCTGCTGAAAATGATGAATTCTATGCTAATAATATGTACCTGAACTTT
GCTGAGATTGGTAGCAATATAAAGAATCTCATGGAAGATTTTTCAGAAGAAGAAACAAAA
GAACAGCAAAAACCTAGAAATCAATAGCAGACATGAAGGCGTTTGTGAGAATTATCCACAG
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AATGACCATTCTAGTCTCTCCAGAATATAAAAAGGCTTCTGCAGAACCCCAAAGTGACA
GAGTTTGATGCTGCCCGCTGGTGATGCTTTATGCTTTACATTATGAGCGACACAGCAGC
AATAGCCTGCCAGGACTAATGATGGACCTCAGGAATAAAGGTGTTTCTGAGAAGTATCGA
AAGCTCGTGTCTGCAGTTGTTGAATATGGTGGTAAACGAGTCAGAGGAAGTGACCTCTTC
AGCCCCAAGATGCTGTGGCTATCACCAACAATTCTCAAAGGACTGAAGGGAGTAGAA
AATGTATATACACAGCATCAACCTTTCCTACATGAAACCTGGATCATCTCATCAAAGGA
AGGCTTAAGGAAAACCTATATCCTTATTTAGGCCCCAGCACACTCAGAGACAGACCTCAG
GATATCATTGTGTTTGAATTTGGAGGAGCCACCTATGAAGAGGCTCTAACAGTTTATAAC
CTGAACCCGACCCTCCTGGAGTGAGGATTGCTCCTGGGAGGCACCACAGTGCACAACACG
AAAAGTTTCTAGAGGAAGTTCTGGCTTCTGGACTGCACAGCCGAAGCAAGGAGAGCTCT
CAAGTCACATCAAGGTCAGCGAGCAGAAGATGA
    
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Clone variation with respect to NM_007259.3

5' Read Nucleotide Sequence: >OriGene 5' read for NM_007259 unedited

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ATTTTGTAAATACGACTCACTATAGGGCGCCGCGAATTCGGCACGAGGAATTCGCCGCCA
TGAACGTGGTTTTGCTGTGAAGCAGTACATTTCCAAAATGATAGAGGACAGCGGGCCTG
GTATGAAAGTACTTCTCATGGATAAAGAGACGACTGGCATAGTGAGTATGGTATACACAC
AATCGGAGATTCTACAGAAGGAAGTGTACCTCTTGAACGCATTGATTCTCAAATCGAG
AGATCATGAAACACCTGAAGGCAATTTGTTTTCTCGACCTACAAAGGAGAATGTGGATT
ATATTATTCAGGAGCTCCGAAGACCCAAATACACTATATATTTTCAATTTATTTTCAGTAATG
TGATCAGCAAGAGTGACGTGAAGTCATTGGCTGAAGCTGATGAACAGGAAGTTGTGGCTG
AGGTTCCAGGAATTTTATGGTGATTACATTGCTGTGAACCCACATTTGTTTTCCCTCAATA
TTTTGGGTTGCTGCCAGGGTCGAAATTGGGATCCAGCCCAGCTATCTAGAACAACCTCAAG
GGCTTACAGCTCTCCTTTTATCTCTGAAGAAGTGTCCCATGATTGTTATCAGCTCTCAT
CAGAGGCAGCAAAGAGACTTGCAGAGTGCCTAAGCAAGTGATAACTAAAGAATATGAAC
TGTTTTGAATTCGTCCAAACAGAGTTTCCCTCATTGCTCCTTATTTTAGATCGCTGTGATG
ATGCCATCACCCATTGCTAAACCAGTGGACATATCATGCCCATGGCCCACGAACTACTA
GGCATAAACAACAATTCGGATTGATCTTTCCANAGTGCCCGGAATCAGTAAAGACTTAAGA
GAGATGGCCCTATCTGCTGCAAATGATGAATT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_007259 unedited CCTGGGAATGGATTCTTATTGTGGTCATACTGGTTTCTCATGCCACAGGAAATTGCTATG TAGGGACAAAAATTTTTGGATGGCTCTGTAAAGAAACATGGTAGGTTTTTCAGAAATGAGT TGTGCAGGAATGTGGTTAATGAAAAGCAGAAAGGGTTAAGGGAAGAGAAAGGAAGCCAAG GAGTGTGGTATGTACATCAAATGATTACTTTTTAAGCCCTCTAGGCTCTGATAACCCTT TCCCAAGTCATATCCCAACAAAATTCATCAGTAACTGAAGTGATTGTGCTAACAGATAC ATAAAGACTACCGGAGAAAAGTGGGTTGAGATGGGCTCATACTTATTGTTAGGACAACCTC TGGGAGTCTTGTCTGTGCCAACCACGTATCCGTGGGCTACCTGGAGATGAGTTCTAAC AACCCAGCACAGAACCCAAAGCTGCTCTCCAACACCTTTGTTTATTAGGAAAACCTGTAT TGGGGACAAGAGAGGAATCTGAGCCCTTCCCAACCACCGTTTTATTTCTGCTCGCTG ACCTTGATGTGACTTGAGAGCTCTCCTTGCTTCGGCTGTGCACTCCATAATCCAGAACTT TCTTTAAGGATACTTTTCGTGTTGTGCACTTGGGGTGCCTCCCATGACAATCCTCACTT CCACGAGTGGTCCGGGTAACGCCATAAACTCGCTTAAGGCTCTATCATATGTGGGTTTC CTCCATTCTCATACCCATTGTTATCCTGGAGGCTTGTTTTTTAGTGCTGCTGGCGCAC CAATTAAGGAATAGGGGCTTTCTTACCCTTACCTTGTATGAAGACGATCCACGGCTCG TCTAGTTAGAATAGTGTGATTGCTAAGTTAATCAATCTAGCCCTCCGCTTAGCGTCCCT TCGAGATATCGTCCGTCTGTTTCTCTCTACCTCAGGCTGGGATATATGTACTCCACCT CGCCCCCTTATACCTCCATCTCCAAATCCCCTAA
Restriction Sites:	NotI-NotI
ACCN:	NM_007259
Insert Size:	2340 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_007259.2, NP_009190.2</u>
RefSeq Size:	2311 bp
RefSeq ORF:	1713 bp
Locus ID:	11311
UniProt ID:	<u>Q9NRW7</u>
Cytogenetics:	1q21.2
Domains:	Sec1

Protein Pathways: Endocytosis

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]
Transcript Variant: This variant (1) encodes the longest isoform (1).