

Product datasheet for **RG238760**

VPS45A (VPS45) (NM_001279354) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VPS45A (VPS45) (NM_001279354) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VPS45A
Synonyms:	H1; H1VPS45; SCN5; VPS45A; VPS45B; VPS54A; VSP45; VSP45A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238760 representing NM_001279354.
 Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**
 ATGGTATACACACAATCGGAGATTCTACAGAAGGAAGTGTACCTCTTTGAACGCATTGATTCTCAAAT
 CGAGAGATCATGAAACACCTGAAGCAATTTGTTTTCTCGACCTACAAAGGAGAATGTGGATTATATT
 ATTCAGGAGCTCCGAAGACCCAAATACACTATATATTTTATTTCAGTAATGTGATCAGCAAGAGT
 GACGTGAAGTCATTGGCTGAAGCTGATGAACAGGAAGTTGTGGCTGAGGTTCCAGGAATTTATGGTGAT
 TACATTGCTGTGAACCCACATTTGTTTTCCCTCAATATTTGGGTTGCTGCCAGGTCGAAATTTGGGAT
 CCAGCCCAGCTATCTAGAACAACCAAGGGCTTACAGCTCTCCTTTTATCTCTGAAGAAGTGTCCCATG
 ATTCGTTATCAGCTCTCATCAGAGGCAGCAAAGAGACTTCGAGAGTGCCTTAAGCAAGTGATAACTAAA
 GAATATGAACTGTTTGAATTCGTCGGACAGAGTTTCTCCATTGCTCCTATTTTAGATCGCTGTGAT
 GATGCCATCACCCATTGCTAAACCAGTGGACATATCAGGCCATGGTCCACGAACACTAGGCATAAAC
 AACAAATCGGATTGATCTTCCAGAGTCCCGGGAATCAGTAAAGACTTAAGAGAAGTGGTCTATCTGCT
 GAAAATGATGAATTCTATGCTAATAATGTACCTGAACCTTTGCTGAGATTGGTAGCAATATAAAGAAAT
 CTCATGGAAGATTTTCAGAAGAAGAAACAAAAGAACAGCAAAAAGTGAATCAATAGCAGACATGAAG
 GCGTTTGTGAGAATTATCCACAGTTCAAGAAAATGTCTGGGACTGTTTCAAAGCATGTGACAGTGGTT
 GGAGAAGTGTCTCGATTGGTCAGTGAACCGAATCTGCTGGAGGTTTCAGAGGTTGAGCAAGAAGTGGCC
 TGTCAAATGACCATTCTAGTGTCTCCAGAATATAAAAAGGCTTCTGCAGAACCCCAAAGTGACAGAG
 TTTGATGCTGCCCGCTGGTGATGCTTTATGCTTTACATTATGAGCGACACAGCAGCAATAGCCTGCCA
 GGACTAATGATGGACCTCAGGAATAAAGGTGTTTCTGAGAAGTATCGAAAGCTCGTGTCTGCAGTTGTT
 GAATATGGTGGTAAACGAGTCCAGAGGAGTCACTTTCAGCCCAAAGATGCTGTGGTATCACAAA
 CAATTCCTCAAAGGACTGAAGGGAGTAGAAAATGTATATACACAGCATCAACCTTTCTCATGAAACC
 CTGGATCATCTCAAAAGGAAGGCTTAAAGAAAACCTATATCCTTATTTAGGCCCCAGCACACTCAGA
 GACAGACCTCAGGATATCATTGTGTTTGAATTGGAGGAGCCACCTATGAAGAGGCTCTAACAGTTTAT
 AACCTGAACCGCACCACTCCTGGAGTGGAGATTGTCTGGGAGGCACCACAGTGCACAACACGAAAAGT
 TTCCTAGAGGAAGTTCTGGCTTCTGGACTGCACAGCCGAAGCAAGGAGAGCTCTCAAGTCACATCAAG
 TCAGCGAGCAGAAGA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG238760
 Blue=ORF Red=Cloning site Green=Tag(s)

MVYTQSEILQKEVYLFERIDSQNREIMKHLKAICFLRPTKENVDYIIQELRRPKYTIYFIYFSNVISKS
 DVKSLAEADEQEVAEVQEFYGDYIAVNPFLFSLNILGCCQGRNWDPAQLSRTTQGLTALLSLKKCPM
 IRYQLSSEAAKRLAECVKQVITKEYELFEFRTEVPPLLLILDRCDDAITPLLNQWYQAMVHELLGIN
 NNRIDL SRVPGISKDLREVVL SAENDEFYANNMYLNFAEIGSNIKNLMEDFQKKPKQQKLESIADMK
 AFVENYPQFKMSGTVSKHVTVVGEL SRLVSEPNLLEVEVEQELACQNDHSSALQNIKRLLQNPKVTE
 FDAARLVMLYALHYERHSSNSLPLMMDLRNKGVSEKYRKLVSAYVEYGGKRVRSGLDFSPKDAVAITK
 QFLKGLKGVENVYTHQHPFLHETLDHLIKGRLKENLYPYLGPSTLRDRPQDIIVFVIGGATYEEALTVY
 NLNRTTPGVRIVLGGTTVHNTKSFLEEVLASGLHSRSKESQVTSRSASRR
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001279354

ORF Size: 1602 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).

RefSeq: [NM_001279354.2](#)

RefSeq Size: 2469 bp

RefSeq ORF: 1605 bp

Locus ID: 11311

UniProt ID: [Q9NRW7](#)

Cytogenetics: 1q21.2

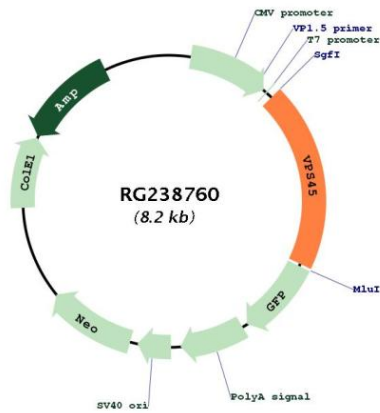
Protein Pathways: Endocytosis

MW: 61.6 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]

Product images:



Circular map for RG238760