

Product datasheet for **RG206027**

VPS45A (VPS45) (NM_007259) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VPS45A (VPS45) (NM_007259) 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:

>RG206027 representing NM_007259
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAACGTGGTTTTTCTGTGAAGCAGTACATTTCCAAAATGATAGAGGACAGCGGGCTGGTATGAAAG
 TACTTCTCATGGATAAAGAGACGACTGGCATAGTGAGTATGGTATACACACAATCGGAGATTCTACAGAA
 GGAAGTGACCTCTTGAACGCATTGATTCTCAAATCGAGAGATCATGAAACACCTGAAGGCAATTTGT
 TTTCTTCGACCTACAAAGGAGAATGTGGATTATATTATTCAGGAGCTCCGAAAGACCCAAATACACTATAT
 ATTTCAATTTATTCAGTAATGTGATCAGCAAGAGTGACGTGAAGTCATTGGCTGAAGCTGATGAACAGGA
 AGTTGTGGCTGAGGTTACAGGAATTTATGGTATTACATTGCTGTGAACCCACATTTGTTTTCCCTCAAT
 ATTTTGGGTTGCTGCCAGGTCGAAATGGGATCCAGCCAGCTATCTAGAACAACCTCAAGGGCTTACAG
 CTCTCTTTTATCTCTGAAGAAGTGTCCCATGATTCGTTATCAGCTCTCATCAGAGGCAGCAAAGAGACT
 TGCAGAGTGCCTAAGCAAGTGATAACTAAAGAATATGAACTGTTGAATCCGTCGGACAGAGGTTCTCT
 CCATTGCTCCTTATTTAGATCGCTGTGATGATGCCATCACCCCATTTGCTAAACCAAGTGGACATATCAGG
 CCATGGTCCACGAACTACTAGGCATAAACAACAATCGGATTGATCTTCCAGAGTGCCGGGAATCAGTAA
 AGACTTAAGAGAAGTGGTCTATCTGCTGAAAATGATGAATTTCTATGCTAATAATATGTACCTGAACTTT
 GCTGAGATTGGTAGCAATATAAAGAATCTCATGGAAGATTTTCAGAAGAAGAAACCAAAGAACAGCAAA
 AACTAGAATCAATAGCAGACATGAAGGCGTTTGTGAGAATTATCCACAGTTCAAGAAAATGTCTGGGAC
 TGTTTCAAAGCATGTGACAGTGGTTGGAGAAGTGTCTCGATTGGTCAGTGAACGGAATCTGCTGGAGGTT
 TCAGAGGTTGAGCAAGAAGTGGCTGTCAAATGACCATTCTAGTGTCTCCAGAATATAAAAAGGCTTC
 TGCAGAACCCCAAAGTGACAGAGTTTGATGCTGCCCGCTGGTGTGCTTTATGCTTTACATTATGAGCG
 ACACAGCAGCAATAGCCTGCCAGGACTAATGATGGACCTCAGGAATAAAGGTGTTTCTGAGAAGTATCGA
 AAGCTCGTGTCTGCAGTTGTTGAATATGGTGGTAAACGAGTCAGAGGAAGTGACCTCTCAGCCCCAAAG
 ATGCTGTGGCTATCACCAACAATTCTCAAAGGACTGAAGGGAGTAGAAAATGTATATACACAGCATCA
 ACCTTTCTACATGAAACCCTGGATCATCTCATCAAAGGAAGGCTTAAGGAAAACCTATATCCTTATTTA
 GGCCCCAGCACACTCAGAGACAGACCTCAGGATATCATTGTGTTTGAATGGAGGAGCCACCTATGAAG
 AGGCTCTAACAGTTTATAACCTGAACCGCACCCTCTGGAGTGAGGATTGCTCTGGGAGGCACCACAGT
 GCACAACAGAAAAGTTTCTAGAGGAAGTTCTGGCTTCTGGACTGCACAGCCGAAGCAAGGAGAGCTCT
 CAAGTCACATCAAGGTCAGCGAGCAGAAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

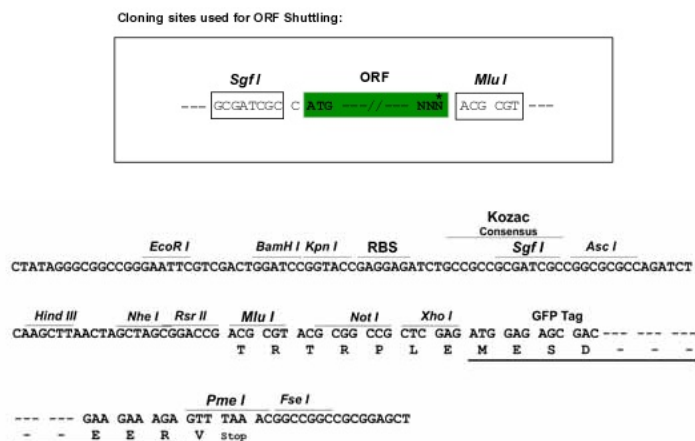
>RG206027 representing NM_007259
 Red=Cloning site Green=Tags(s)

MNVVFAVKQYISKMIEDSGPMKVLMDKETTGI VSMVYTQSEILQKEVYLFERIDSQNREIMKHLKAIC
 FLRPTKENVDYIIQELRRPKYTIYFIYFSNVISKSDVKS LAEAEQEVVAEVQEFYGDYIAVNPFLSLN
 ILGCCQGRNWDPAQLSRTTQGLTALLLSLKKCPMIRYQLSSEAARKLAECVKQVITKEYELFEFRRETEVP
 PLLLLILDRCDDAITPLLNQWYQAMVHELLGINNNRIDLSRVPGISKDLREVVLSAENDEFYANNMYLNF
 AEIGSNIKNLMEDFQKKPKKEQQKLESIA DMKAFVENYPQFKMMSGTVSKHVTVVGEL SRLVSE RNLLEV
 SEVEQELACQNDHSSALQNIKRL LQNPKVTEFDAARL VMLYALHYERHSSNSLPGLMMDLRNKGVSEKYR
 KLVSAVVEYGGKRVGRSDLFSPKDAVAITKQFLKGLKGVENVYTOHPFLHETLDHLIKGRLKENLYPYL
 GPSTLRDRPQDIIVFVIGGATYEEALTVYNLNRTPGVRIVLGGTTVHNTKSFLEEVLASGLHSRSKES
 QVTSRSASRR

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_007259

ORF Size: 1710 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_007259.5](#)

RefSeq Size: 2817 bp

RefSeq ORF: 1713 bp

Locus ID: 11311

UniProt ID: [Q9NRW7](#)

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]

Product images:



Circular map for RG206027