

Product datasheet for **RG238793**

VPS45A (VPS45) (NM_001279353) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | VPS45A (VPS45) (NM_001279353) 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) |



[View online »](#)

ORF Nucleotide Sequence:

>RG238793 representing NM_001279353.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGTATACACACAATCGGAGATTCTACAGAAGGAAGTGTACCTCTTTGAACGCATTGATTCTCAAAAT
CGAGAGATCATGAAACACCTGAAGGCAATTTGTTTTCTCGACCTACAAAGGAGAATGTGGATTATATT
ATTCAGGAGCTCCGAAGACCCAAATACACTATATATTTTCAATTTTTCAGTAATGTGATCAGCAAGAGT
GACGTGAAGTCATTGGCTGAAGCTGATGAACAGGAAGTTGTGGCTGAGGTTTCAGCAAGTGATAACTAAA
GAATATGAACTGTTTGAATTCCTCGGACAGAGTTTCCATTGCTCCTATTTTAGATCGCTGTGAT
GATGCCATCACCCATTGCTAAACCAGTGGACATATCAGGCCATGGTCCACGAACACTAGGCATAAAC
AACAAATCGGATTGATCTTCCAGAGTCCCGGGAATCAGTAAAGACTTAAGAGAAGTGGTCTATCTGCT
GAAAATGATGAATTCTATGCTAATAATATGTACCTGAACCTTGTGAGATTGGTAGCAATATAAAGAAAT
CTCATGGAAGATTTTCAGAAGAAGAAACAAAAGAACAGCAAAACTAGAATCAATAGCAGACATGAAG
GCGTTTGTGAGAATTATCCACAGTTCAAGAAAATGTCTGGGACTGTTTCAAAGCATGTGACAGTGGTT
GGAGAAGTGTCTCGATTGGTCAGTGAACGGAATCTGCTGGAGGTTTCAGAGGTTGAGCAAGAAGTGGCC
TGTCAAAATGACCATTCTAGTGCTCTCCAGAATATAAAAAGGCTTCTGCAGAACCCCAAAGTGACAGAG
TTTGATGCTGCCCGCTGGTGATGCTTTATGCTTTACATTATGAGCGACACAGCAGCAATAGCCTGCCA
GGACTAATGATGGACCTCAGGAATAAAGGTGTTTCTGAGAAGTATCGAAAGCTCGTGTCTGCAGTTGTT
GAATATGGTGGTAAACGAGTCAGAGGAAGTGACCTCTTCAGCCCCAAAGATGCTGTGGCTATCACAAA
CAATTCCTCAAAGGACTGAAGGGAGTAGAAAATGTATATACACAGCATCAACCTTTCCTACATGAAACC
CTGGATCATCTCATCAAAGGAAGGCTTAAGGAAAACCTATATCCTTATTTAGGCCCCAGCAGCACTCAGA
GACAGACCTCAGGATATCATTGTGTTTGTAAATGGAGGAGCCACCTATGAAGAGGCTCTAACAGTTTAT
AACCTGAACCGCACCACTCTGGAGTGAGGATTGTCTGGGAGGCACCACAGTGCACAACACGAAAAGA
GATGGGGTTTCACTATGTTCCCCTGCCTGGTTTGAACCTCCTGGGCTCAAGCGATCCACCCGCTCAGC
CTCCCAAAGTGTGGGATTACAGCTTTCCTAGAGGAAGTTCTGGCTTCTGGACTGCACAGCCGAAGCAA
GGAGAGCTCTCAAGTCACATCAAGGTCAGCGAGCAGAAGATGAAACGGTGGTTGGGGGAAGGGCACAGC
TTCCTCTTGTCCCACTACAGGTTTTCCCTACTAAACAAGGTGTTGGAGAGCAGCTTGGGTTCTG
TGCTGTTGTTAGAACTCATCTCCAGG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence:

>Peptide sequence encoded by RG238793
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MVYTQSEILQKEVYLFERIDSQNREIMKHLKAICFLRPTKENVDYIIQELRRPKYTIYFIYFSNVISKS
DVKSLAEADEQEVAEVQVITKEYELFEFRREVPPLLLILDRCDDAITPLLNQWYQAMVHELLGIN
NNRIDLSRVPGISKDLREVVLSAENDEFYANNMYLNFAEIGSNIKNLMEDFQKKPKKQKLESIADMK
AFVENYPQFKMSGTVSKHVTVVGGELSRLYSERNLLEVSEVEQELACQNDHSSALQNIKRLQLQPKVTE
FDAARLVMLYALHYERHSSNSLPLMMDLRNKGVSEKYRKLVSAYVEYGGKRVRSDFSPKDAVAITK
QFLKGLKGVENVYTHQHPFLHETLDHLIKGRLKENLYPYLGPSTLRDRPQDIIVFVIGGATYEEALTVY
NLNRTTPGVRIVLGGTTVHNTKRDGVSLSPAWFRTPLKSTRSLPKCWDYSFPRGSSGFWTAQPKQ
GELSSHIVSEQKMKRWLGEHGSFLSCPHYRFSLNKGVGEQLWVLCWLELISR
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPISILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001279353

ORF Size: 1614 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_001279353.2](#)

RefSeq Size: 2367 bp

RefSeq ORF: 1617 bp

Locus ID: 11311

UniProt ID: [Q9NRW7](#)

Cytogenetics: 1q21.2

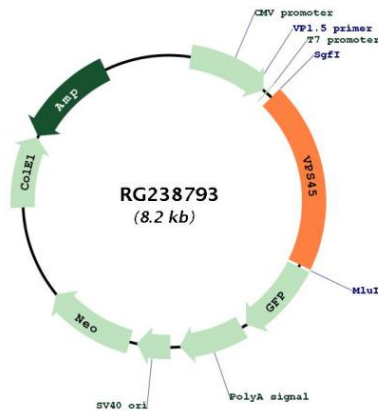
Protein Pathways: Endocytosis

MW: 62.4 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 RG238793