

Product datasheet for **RG238285**

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: | TurboGFP |
| Symbol: | VPS45 |
| 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) |
| ORF Nucleotide Sequence: | >RG238285 representing NM_001279355. Blue=ORF Red=Cloning site Green=Tag(s) |

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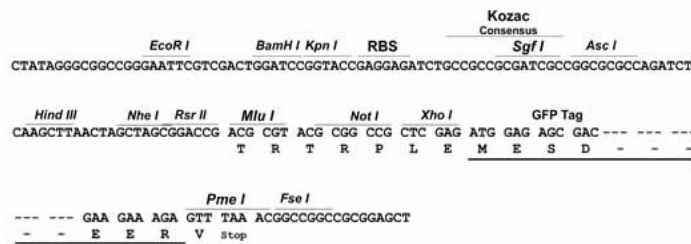
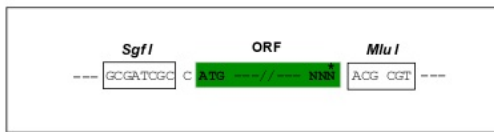
Protein Sequence: >Peptide sequence encoded by RG238285
 Blue=ORF Red=Cloning site Green=Tag(s)

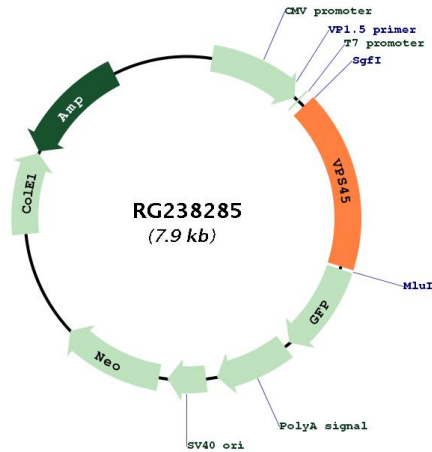
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 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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).

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]