

Product datasheet for **RC202151**

VPS33A (NM_022916) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VPS33A (NM_022916) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VPS33A
Synonyms:	MPSPS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202151 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCTCATCTGTCCTACGGCCGAGTGAACCTAAACGTGTTGCGCGAGGCGGTGCGTCGCGAGCTGC
 GCGAGTTCCTGGACAAGTGCGCAGGAAGCAAGCAATAGTTGGGATGAATACCTAACTGGACCCTTTGG
 CCTGATTGCACAGTATTCACTATTGAAGGAACATGAAGTGAAAAAATGTTACACCTTAAAGGAAATCGT
 TTGCCGCGAGCTGATGTGAAGAATAAATTTTTTTGTCAGACCCAGGCTAGAGTTGATGGATAAATCG
 CTGAAAACGTGCTCAGTGAAGATAGACGAGGCCAACGAGAGATTTTCATATTCTGTTTGTCCACGCCG
 TAGCCTGTTGTGCGAACAGCGGTTGAAGGATCTGGGTGTCTTGGGATCCTTTATTCACAGGGAGGAGTAC
 AGCTTAGATCTCATTCCATTGATGGGGATCTCTATCCATGGAATCAGAGGGTGCATTCAAAGAGTGCT
 ACCTGGAGGGTGACCAGACGAGCCTGTACCACGCAGCCAAGGGGCTGATGACCCTGCAAGCTCTGTATGG
 AACGATCCCCAGATCTTTGGGAAAGGAGAATGCGCTCGCAAGTGGCCAATATGATGATCAGGATGAAG
 AGAGAGTTTACAGGAAGCCAGAATCAATATTTCTGTTTTGATAATCTCTTGTGCTTATCGGAATG
 TGGATTTATTAACACCTCTTGCCACTCAGCTGACATATGAAGGACTCATTGATGAAATTTATGGCATTCA
 GAACAGTTATGTGAAATACCTCCAGAGAAATTTGCACCTAAGAAACAGGGCGATGGTGGTAAGGACCTC
 CCCACGGAAGCAAAGAAGCTGCAGCTGAATTTGCAGAGGAGCTCTATGCTGAGATCCGAGATAAGAACT
 TCAACGCAAGTTGGCTCTGTGCTCAGCAAGAAAGCAAAGATCATCTCTGCAGCATTGAGGAAAGACAA
 TGCTAAGACCGTGGGGGAGATCAAGCAGTTTGTTCAGTTGCCACATGCAGGCAGCAAGGGGCTCG
 CTTGCAAACCATACCTCAATTGCAGAATTGATCAAAGATGCTACTTCTGAAGACTTTTTTGATAAAT
 TAACCTGGAACAGGAGTTTATGTCTGGAATAGACACTGATAAGGTCAACAATTACATGAGGATGTAT
 CGCCAAAAGCACTCGTTGATCAAGGTGTTAAGACTAGTTTGCCTCCAATCCGTGTGTAATAGTGGGCTC
 AAACAAAAGTTTTGGATTATTACAAAAGAGATTCTCCAGACATACGGCTATGAGCACATATTGACCT
 TACACAACCTGGAGAAGGCCGCTGCTGAAACCGCAGACGGGGGCAGAAACAATTACCAACTATACG
 GAAAACATTACGCTCTGGATGGATGATGTTAATGAGCAAAACCCACGGACATATCGTATGTGTACAGT
 GGGTATGCCCCGCTCAGTGTGCGGCTGGCCAGCTGCTTCCCGGCTGGCTGGCGGAGCATCGAGGAGG
 TCCTCCGCATCTCCAGGGCCCACTTTGAGGAGCGGCAGCCACTGCCACAGGACTGCAGAAGAAACG
 TCAACCGGGAGAAAACCGAGTGACTCTGATATTTTCTTGGGGCGTAACCTTCGCTGAAATTGCTGCC
 CTGCGATTTCTCTCCAGTTGGAAGATGGAGGTACAGAATATGTCATTGCCACCCTAAACTAATGAATG
 GAACCAGTTGGATAGAGGCTCTGATGAAAAACCTTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202151 protein sequence
 Red=Cloning site Green=Tags(s)

MAAHL SYGRVNLNVLREAVRRELREFLDKAGSKAIVWDEYLTGPFGLIAQYSLLKEHEVEKMFLLKGNR
 LPAADVKNIIFFVRPRLELMDIIAENVLSEDRRGPTRDFHILFVPRRSLICEQLKDLGVLGSFIHREEY
 SLDLIPFDGDLLEMESEGAFKECYLEGDQTSLYHAAKGLMTLQALYGTIPQIFGKGEARQVANMMIRMK
 REFTGSQNSIFPVFDNLLLLDRNVDLLTPLATQLTYEGLIDEIYGIQNSYVKLPPEKFAFKKQDGGKDL
 PTEAKKLQNSAEELYAEIRDKNFNAVGSVLSKKAKIISAAFEERHNAKTVGEIKQFVSQLPHMQAARG
 LANHTSIAELIKDVTTSDFDKLTVEQEFMSGIDTDKVNYYIEDCIAQKHSLIKVLRVCLQSVCSNGL
 KQKVLDDYKREILQTYGYEHILTLHNLEKAGLLKPQTGGRRNYPTIRKTLRLWMDVNEQNPTDISYVYS
 GYAPLSVRLAQLLSRPGWRSIEEVLRLPGPHFEERQPLPTGLQKQRQGENRVTLIFLLGGVTFAEIAA
 LRFLSQLLEDGGTEYVIATTKLMNGTSWIEALMEKPF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6092_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022916

ORF Size: 1788 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_022916.6](#)

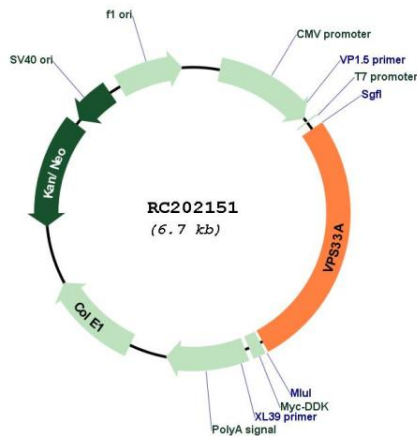
RefSeq Size: 2628 bp

RefSeq ORF: 1791 bp

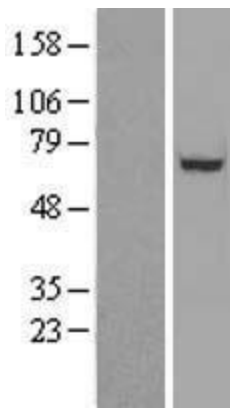
Locus ID: 65082
UniProt ID: [Q96AX1](#)
Cytogenetics: 12q24.31
Domains: Sec1
MW: 67.6 kDa

Gene Summary: This gene encodes a tethering protein and a core subunit of the homotypic fusion and protein sorting (HOPS) complex. The HOPS complex and a second endosomal tethering complex called the class C core vacuole/endosome tethering (CORVET) complex, perform diverse functions in endocytosis including membrane tethering, RabGTPase interaction, activation and proofreading of synaptic-soluble N-ethylmaleimide-sensitive factor attachment receptor (SNARE) assembly to drive membrane fusion, and endosome-to-cytoskeleton attachment. The HOPS complex controls endosome maturation as well as endosome traffic to the lysosome. This complex is essential for vacuolar fusion and is required for adaptor protein complex 3-dependent transport from the golgi to the vacuole. The encoded protein belongs to the Sec1/Munc18 (SM) family of SNARE-mediated membrane fusion regulators. Naturally occurring mutations in this gene are associated with a novel mucopolysaccharidosis-like disease. [provided by RefSeq, Apr 2017]

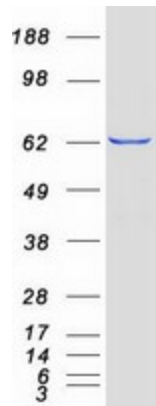
Product images:



Circular map for RC202151



Western blot validation of overexpression lysate (Cat# [LY411454]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202151 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VPS33A protein (Cat# [TP302151]). The protein was produced from HEK293T cells transfected with VPS33A cDNA clone (Cat# RC202151) using MegaTran 2.0 (Cat# [TT210002]).