

Product datasheet for **MR209292**

Vps33a (NM_029929) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Vps33a
Synonyms:	3830421M04Rik; AI503300; AW048546; AW554476; bf
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR209292 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGCGCACCTGTCGTACGGGCGAGTGAACCTGAACGTGCTGCGCGAGGCGGTGCGTCGGGAGCTGC
 GCGAGTTCCTGGACAAGTGCCTGGGAGCAAGGCAATAGTGTGGGATGAGTACTTAACAGGACCATTTGG
 ACTGATCGCACAGTACTCACTACTAAAGGAACATGAAGTGGAAAAATGTTACACTTAAAGGAAGTCGT
 CTGCCCGCAGCTGATGTCAAGAATCATTTTTTTGGTCAGACCCAGGCTAGAGCTGATGGACATAATTG
 CTGAGAATGTACTCAGTGAGGACAGGCGTGGCCCTACCAGGGATTTCCATATTTTGTGTGCTCGCCG
 GAGCCTACTGTGTGAGCAGCGCTGAAGGACCTGGGGTTTTGGGATCCTTTATTCATCGAAGAATAAC
 AGCTTGGATCTCATTCCATTTGATGGGACCTCTTATCCATGGAGTCAGAGGCGCTTTCAAAGAGTGCT
 ACCTGGAAGCGCAGCAGCAGCCTGTACCACGACGCAAGGGGCTGATGACCTGCAGGCGCTGTATGG
 AACTATCCCCCAGATCTTTGGGAAAGGAGAGTGCTCGGCAAGTGCCAATATGATGGTCAGGATGAAG
 AGGGAGTTCACAGGAAGCCAGAACTCAGTGTCCCCGTGTTTGATAACCTCTTGCTGCTTGCATCGCAATG
 TGGATCTCCTGACGCCACTCGCTCCAGCTCAGTATGAAGGCCCTCATCGATGAGATTTACGGCATTCA
 GAACAGTTATGTGAAGTTGCCTCCAGAGAAGTTTGACCCCAAGAAGCAGGCTGGCGGCAAGTGGTGGGAAG
 GACCTTCCCACGGAGGCCAAGAAGCTTCAGTCAACTCCGACAGGAGCTCTACGCCGAGATCCGAGACA
 AGAACTTCAACGCTGTGGGCTCTGTGCTCAGCAAGAAGGCGAAGATCATCTCTGACGCTTCGAGGAGCG
 ACACAACGCTAAGACAGTCGGGGAGATCAAGCAGTTTTCGCTCCAGCTACCCACATGCAGGCAGCCAGG
 GGATCGCTCGCCAAACCACCTCAATTGCAGAGTTAATCAAAGACGTCAACCTTCTGAAGACTTCTTTG
 ATAAGTTGACAGTGGAGCAGGAGTTTATGTCGGGATAGACTGATAAGGTCAACAGTTACATCGAGGA
 CTGCATTGCCCAAAGCATCCACTCATCAAGGTGCTGAGACTGGTTTGCCTCCAGTCTGTGTGCAACAGC
 GGGCTCAAGCAGAAGGTGCTGGACTATTACAGAAGGGAGATCCTCCAGACCTACGGCTATGAGCACATAC
 TGACCTTGAACAACCTGGAGAAGGCCCGCTGCTCAAGGCTCAGACAGGGGGCAGAAACAATTACCCAAC
 AATCCGGAAAACACTGCGCCTCTGGATGGACGATGTCAATGAACAAAACCCACAGACATATCCTATGTG
 TACAGCGGTTATGCTCCACTCAGCGTGCAGTGGCTCAGCTCCTTTCCCGGCCAGGCTGGCGGAGCATCG
 AGGAGGTTCTCCGATTCTCCAGGGCCCCACTTTGAAGAAAGACAGCCACTGCCACCGGGCTGCAGAA
 GAAACGCCAGCCAGGAGAAAACAGAGTCACACTGGTATTTTCTCGGGGGCTCACCTTTGCGGAAATA
 GCCGCCCTGCGATTTTGTCCAGCTGGAAGATGGAGGCACCGAGTATGTCATTGCGACCACTAACTGA
 TGAATGGAACAGCTGGATAGAAGCTCTCATGAAAAGCCTTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209292 protein sequence
 Red=Cloning site Green=Tags(s)

MAAHSYGRVNLNVLREAVRRELREFLDKAGSKAIVWDEYLTGPFGLIAQYSLLEHEVEKMFLLKGSR
 LPAADVKNIIIFLVRPRLEMDIIAENVLSEDRRGPTDRFHILFVPRRSLCEQRLKDLGVLGSFIHREEY
 SLDLIPFDGDLLEMESEGAFFKECYLEGDQTSLYHAAKGLMTLQALYGTIPQIFGKGECARQVANMMVRMK
 REFTGSQNSVFPVFDNLLLDRNVDLLTPLASQLTYEGLIDEIYGIQNSYVKLPPEKFAPKKQGGGSGGK
 DLPTEAKKLQLNSAEELYAEIRDKNFNAVGSVLSKKAKIIISAAFEERHNAKTVEIKQFASQLPHMQAAR
 GSLANHTSIAELIKDVTTSEDFDKLTVEQEFMSGIDTDKVNYSIEDCIAQKHPLIKVLRVCLQSVNS
 GLKQKQLDYRREILQTYGYEHILTLNLEKAGLLKAQTGGRNNYPTIRKTLRLWMDDVNEQNPTDISYV
 YSGYAPLSVRLAQLLSPRGWRSIEEVLRIPLGPHFEERQPLPTGLQKKRQPGENRVTLVFFLGGVTFAEI
 AALRFLSQLEDGGTEYVIATTKLMNGNSWIEALMEKPF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_029929

ORF Size: 1794 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.

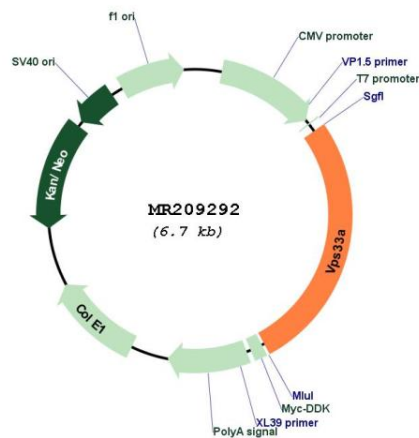
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_029929.2](#), [NP_084205.2](#)

RefSeq Size:	4114 bp
RefSeq ORF:	1797 bp
Locus ID:	77573
UniProt ID:	Q9D2N9
Cytogenetics:	5 63.03 cM
MW:	67.5 kDa

Gene Summary: Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the endocytic membrane transport and autophagic pathways. Believed to act as a core component of the putative HOPS and CORVET endosomal tethering complexes which are proposed to be involved in the Rab5-to-Rab7 endosome conversion probably implicating MON1A/B, and via binding SNAREs and SNARE complexes to mediate tethering and docking events during SNARE-mediated membrane fusion. The HOPS complex is proposed to be recruited to Rab7 on the late endosomal membrane and to regulate late endocytic, phagocytic and autophagic traffic towards lysosomes. The CORVET complex is proposed to function as a Rab5 effector to mediate early endosome fusion probably in specific endosome subpopulations. Required for fusion of endosomes and autophagosomes with lysosomes; the function is dependent on its association with VPS16 but not VIPAS39. The function in autophagosome-lysosome fusion implicates STX17 but not UVRAG.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209292