

Product datasheet for RC207533

VAMP2 (NM_014232) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: VAMP2 (NM_014232) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: VAMP2
Synonyms: NEDHAHM; SYB2; VAMP-2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC207533 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCTACCGCTGCCACGGCCCCCTGCTGCCCGGCTGGGGAGGGTGGTCCCCCTGCACCCCTC
CAAACCTACCAGTAACAGGAGACTGCAGCAGACCCAGGCCAGGTGGATGAGGTGGTGGACATCATGAG
GGTGAACGTGGACAAGGTCCTGGAGCGAGACCAGAAGCTGTGGAGCTGGACGACCGTGCAGATGCACTC
CAGGCGGGGGCTCCCAGTTTGAACAAGCGCAGCCAAGCTCAAGCGCAAATACTGGTGGAAAACTCA
AGATGATGATCATCTTGGGAGTGATTTGCCCATCATCCTCATCATCATAGTTTACTTCAGCACT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207533 protein sequence
 Red=Cloning site Green=Tags(s)
 MSATAATAPPAAPAGEGGPPAPPNLTSNRRLQQTQAQVDEVVDIMRVNVDKVLERDQKLSLDDRADAL
QAGASQFETSAAKLKRKYWWKLNKMMIILGVICAIILIIIVYFST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6239_h08.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_014232

ORF Size: 348 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_014232.3](#)

RefSeq Size: 2173 bp

RefSeq ORF: 351 bp

Locus ID: 6844

UniProt ID: [P63027](#)

Cytogenetics: 17p13.1

Domains: synaptobrevin

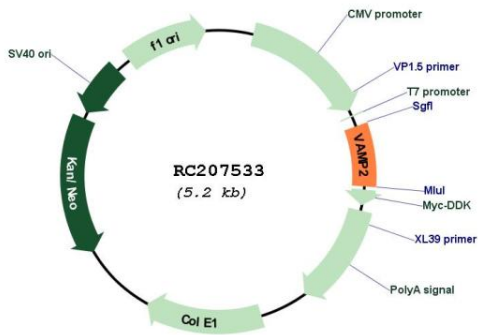
Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: SNARE interactions in vesicular transport

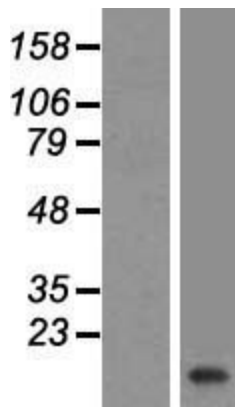
MW: 12.7 kDa

Gene Summary: The protein encoded by this gene is a member of the vesicle-associated membrane protein (VAMP)/synaptobrevin family. Synaptobrevins/VAMPs, syntaxins, and the 25-kD synaptosomal-associated protein SNAP25 are the main components of a protein complex involved in the docking and/or fusion of synaptic vesicles with the presynaptic membrane. This gene is thought to participate in neurotransmitter release at a step between docking and fusion. The protein forms a stable complex with syntaxin, synaptosomal-associated protein, 25 kD, and synaptotagmin. It also forms a distinct complex with synaptophysin. It is a likely candidate gene for familial infantile myasthenia (FIMG) because of its map location and because it encodes a synaptic vesicle protein of the type that has been implicated in the pathogenesis of FIMG. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC207533



Western blot validation of overexpression lysate (Cat# [LY415423]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207533 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).