

Product datasheet for **RR214029**

Vps29 (NM_001105932) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Vps29 (NM_001105932) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Vps29
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR214029 representing NM_001105932
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTGGTGGTATTAGGAGATCTGCACATTCCACACCGGTGCAACAGCCTGCCGGCCAAATTTAAAA
 AACTCCTGGTGCCAGGAAAAATCCAGCACATTCTGCACTGGAAACCTTGCACCAAGGAGAGCTATGA
 CTATCTCAAGACTCTGGCTGGTATGTCCACATCGTAAGAGGAGACTTCGATGAGAGTCTGAATTACCCA
 GAACAGAAGGTTGTGACTGTGGGCAGTCAAGATCGGTCTGATCCATGGCCACCAAGTTATCCGTGGG
 GAGACATGGCTAGCTTAGCCCTGCTGCAGAGGCAGTTTGTATGGACATTCTTATCTCAGGACACACACA
 CAAATTCGAAGCATTGAGCATGAAAAATAATTCTATATTAACCCAGTTCTGCCACTGGAGCCTATAAT
 GCCTTGAAACAAATATTATTCCGTCATTTGTGCTGATGGACATCCAGGCTTCTACCGTGGTCACTTACG
 TCTATCAGCTAATTGGAGATGACGTAAGTAGAACGAATTGAGTATAAAAAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR214029 representing NM_001105932
 Red=Cloning site Green=Tags(s)

MLVLVLGDLHIPHCNSLPAKFKKLLVPGKIQHILCTGNLCTKESYDYLKTLAGDVHIVRGDFDESLNYP
 EQKVVTVGQFKIGLIHGHQVIPWGDMSLALLQRQFDVDILISGHTHKFEAFEHENKFYINPGSATGAYN
 ALETNIIPSVLMDIQASTVVVTVYVYQLIGDDVKVERIEYKKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



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RefSeq: [NM_001105932.1](#), [NP_001099402.1](#)

RefSeq Size: 1159 bp

RefSeq ORF: 549 bp

Locus ID: 288666

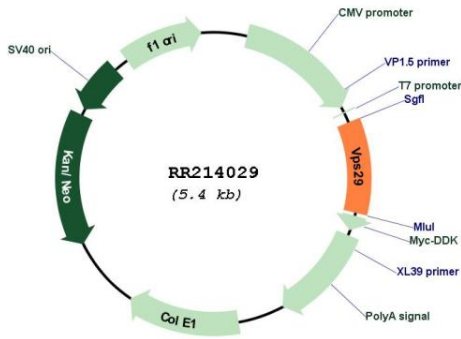
UniProt ID: [B2RZ78](#)

Cytogenetics: 12q16

MW: 20.5 kDa

Gene Summary: Acts as component of the retromer cargo-selective complex (CSC). The CSC is believed to be the core functional component of retromer or respective retromer complex variants acting to prevent missorting of selected transmembrane cargo proteins into the lysosomal degradation pathway. The recruitment of the CSC to the endosomal membrane involves RAB7A and SNX3. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX3-retromer mediates the retrograde endosome-to-TGN transport of WLS distinct from the SNX-BAR retromer pathway. The SNX27-retromer is believed to be involved in endosome-to-plasma membrane trafficking and recycling of a broad spectrum of cargo proteins. The CSC seems to act as recruitment hub for other proteins, such as the WASH complex and TBC1D5. Required to regulate transcytosis of the polymeric immunoglobulin receptor (pIgR-pIgA). Acts also as component of the retriever complex. The retriever complex is a heterotrimeric complex related to retromer cargo-selective complex (CSC) and essential for retromer-independent retrieval and recycling of numerous cargos such as integrin alpha-5/beta-1 (ITGA5:ITGB1). In the endosomes, retriever complex drives the retrieval and recycling of NxxY-motif-containing cargo proteins by coupling to SNX17, a cargo essential for the homeostatic maintenance of numerous cell surface proteins associated with processes that include cell migration, cell adhesion, nutrient supply and cell signaling. The recruitment of the retriever complex to the endosomal membrane involves CCC and WASH complexes. Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with ANKRD27. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR214029