

# Product datasheet for MC200554

## Vps29 (NM\_019780) Mouse Untagged Clone

## **Product data:**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Expression Plasmids
Product Name:	Vps29 (NM_019780) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Vps29
Synonyms:	2010015D08Rik; AW049835; PEP11
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC005663 sequence for NM_019780 GGAAGAGGCGGCGGCGCTTCGTGGTGATTGTACGGAGCCCTGGTGACAGGATGTTGGTGTTGGTACTAGG AGATCTGCACATTCCGCACCGGTGCAACAGCCTGCCGGCCAAGTTTAAAAAACTCCTGGTGCCAGGAAAA ATCCAGCACATCCTCTGCACCGGCAACCTCTGCACCAAGGAGAGCTACGACTATCTCAAGACTCTGGCTG GCGACGTCCACATCGTGAGAGGAGACTTCGATGAGAATCTGAATTACCCAGAACAAAAGGTTGTGACTGT GGGCCAGTTCAAGATCGGTCTGATTCACGGACACCAAGTTATTCCGTGGGGAGACATGGCTAGCTTAGCC CTGCTGCAGAGGCAGTTTGATGTGGACATTCTTATCTCAGGACACACAC
<b>Restriction Sites:</b>	Rsrll-Notl
ACCN:	NM_019780
Insert Size:	549 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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ORIGENE         Vps29 (NM_019780) Mouse Untagged Clone - MC200554	
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>BC005663</u> , <u>AAH05663</u>
RefSeq Size:	985 bp
RefSeq ORF:	549 bp
Locus ID:	56433
UniProt ID:	<u>Q9QZ88</u>
Cytogenetics:	5 F

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### ORIGENE Vps29 (NM\_019780) Mouse Untagged Clone – MC200554

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 (plgR-plgA) (By similarity). 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 (By similarity). Has no activity towards p-nitrophenylphosphate, p-nitrophenylphosphorylcholine or phosphatidylinositlphosphates or a phosphorylated peptide derived from retromer cargo (in vitro) (PubMed:21629666, PubMed:15965486).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.

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