

Recombinant Mouse Vps29 Protein, His-tagged

Cat. No. Vps29-7397M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse VPS29 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	E.coli
ProteinLength	1-182
Description	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

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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. Has no activity towards p-nitrophenylphosphate, p-nitrophenylphosphorylcholine or phosphatidylinositolphosphates or a phosphorylated peptide derived from retromer cargo (in vitro).

Form	Liquid
Molecular Mass	23.2 kDa
AA Sequence	MGSSHHHHHSSGLVPRGSHMGSHMMLVLVLGDLHIPHRCNSLPAKFKLLVPGKI QHILCTGNLCTKESYDYLKTLAGDVHIVRGDFDENLNYPEQKVVTVGQFKIGLIHGHQ VIPWGDMA SLALLQRQFDVDILISGHTHKFEAFEHENKFYINPGSATGAYNALETNIIP SFVLMDIQASTVVVTVYVYQLIGDDVKVERIEYKKS
Purity	> 95 % by SDS-PAGE
Stability	Shelf life: one year from despatch.
Storage	Store undiluted at 2-8 centigrade for one week or (in aliquots) at -20 to -80 centigrade for longer. Avoid repeated freezing and thawing.
Concentration	0.5 mg/mL (determined by Bradford assay)

Storage Buffer 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10 % glycerol, 0.1 M NaCl

GENE INFORMATION

Gene Name Vps29 VPS29 retromer complex component [*Mus musculus* (house mouse)]

Official Symbol Vps29

Synonyms Vps29; VPS29 retromer complex component; PEP; PEP11; AW049835; 2010015D08Rik; vacuolar protein sorting-associated protein 29; vacuolar protein sorting 29; vacuolar sorting protein 29; vesicle protein sorting 29; EC 3.1.3.3

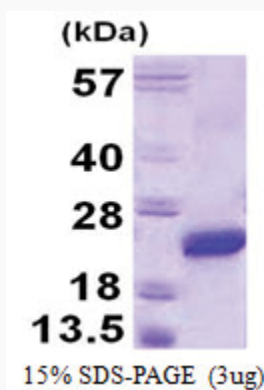
Gene ID 56433

mRNA Refseq NM_001347453

Protein Refseq NP_001334382

UniProt ID Q9QZ88

SDS-PAGE



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