

Product datasheet for AR50293PU-N

VPS29 (1-182, His-tag) Mouse Protein

Product data:

OriGene Technologies, Inc.

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Product Type:	Recombinant Proteins
Description:	VPS29 (1-182, His-tag) mouse recombinant protein, 0.25 mg
Species:	Mouse
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSHMMLVLV LGDLHIPHRC NSLPAKFKKL LVPGKIQHIL CTGNLCTKES YDYLKTLAGD VHIVRGDFDE NLNYPEQKVV TVGQFKIGLI HGHQVIPWGD MASLALLQRQ FDVDILISGH THKFEAFEHE NKFYINPGSA TGAYNALETN IIPSFVLMDI QASTVVTYVY QLIGDDVKVE RIEYKKS
Tag:	His-tag
Predicted MW:	23.2 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol, 0.1M NaCl
Preparation:	Liquid purified protein
Protein Description:	Recombinant Mouse VPS29 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP 001334382</u>
Locus ID:	56433
UniProt ID:	<u>Q9QZ88</u>
Cytogenetics:	5 F
Synonyms:	2010015D08Rik; AW049835; PEP11



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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 SNX27retromer 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]

Product images:



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