

# Datasheet for ABIN7555987 VPS29 Protein (AA 1-182) (His tag)



#### Overview

Quantity:	1 mg
Target:	VPS29
Protein Characteristics:	AA 1-182
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VPS29 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant VPS29 Protein expressed in mammalian cells.
Sequence:	MLVLVLGDLH IPHRCNSLPA KFKKLLVPGK IQHILCTGNL CTKESYDYLK TLAGDVHIVR
	GDFDENLNYP EQKVVTVGQF KIGLIHGHQV IPWGDMASLA LLQRQFDVDI LISGHTHKFE
	AFEHENKFYI NPGSATGAYN ALETNIIPSF VLMDIQASTV VTYVYQLIGD DVKVERIEYK KP
	Sequence without tag. The proposed Purification-Tag is based on experiences with the
	expression system, a different complexity of the protein could make another tag necessary.
	In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	Protein expressed in mammalian cells and purified in one-step affinity chromatography
	The optimized expression system ensures reliability for intracellular, secreted and

transmembrane proteins.

· State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

Target:

VPS29

Alternative Name:

VPS29 (VPS29 Products)

Background:

Vacuolar protein sorting-associated protein 29 (hVPS29) (PEP11 homolog) (Vesicle protein sorting 29), FUNCTION: Acts as a 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-toplasma 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) (PubMed:15247922, PubMed:21725319, PubMed:23563491). 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) (PubMed:28892079). 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 (PubMed:28892079). The recruitment of the retriever complex to the endosomal membrane involves CCC and WASH complexes (PubMed:28892079). Involved in GLUT1 endosome-to-plasma membrane trafficking, the function is dependent of association with ANKRD27 (PubMed:24856514). {ECO:0000269|PubMed:24856514, ECO:0000269|PubMed:28892079, ECO:0000303|PubMed:15247922, ECO:0000303|PubMed:21725319, ECO:0000303|PubMed:23563491}., FUNCTION: (Microbial infection) The heterotrimeric retromer cargo-selective complex (CSC) mediates the exit of human papillomavirus from the early endosome and the delivery to the Golgi apparatus. {ECO:0000269|PubMed:25693203}.

Molecular Weight: 20.5 kDa

UniProt: Q9UBQ0

## **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for

functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months