

KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1745

## **Specification**

## **KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<u>075436</u>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 38 kDa , observed , 38 kDa KDa
Gene Name	VPS26A
Aliases	VPS26A; VPS26 Retromer Complex
	Component A; Hbeta58; PEP8A; VPS26;
	Vacuolar Protein Sorting-Associated
	Protein 26A; Vesicle Protein Sorting 26A;
	Vacuolar Protein Sorting 26 Homolog A (S.
	Pombe); Vacuolar Protein Sorting 26
	(Yeast Homolog): Vacuolar Protein Sorting
	26 Homolog A: VPS26, Retromer Complex
	Component A: VPS26 Retromer Complex
	Comonent A: HVPS26: HB58
Immunogen	A synthesized peptide derived from human VPS26

## KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody - Additional Information

Gene ID 9559 Other Names Vacuolar protein sorting-associated protein 26A, Vesicle protein sorting 26A, hVPS26, VPS26A {ECO:0000303|PubMed:30213940, ECO:0000312|HGNC:HGNC:12711}

## KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody - Protein Information

#### Name VPS26A {ECO:0000303|PubMed:30213940, ECO:0000312|HGNC:HGNC:12711}

#### 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-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 spectrum of cargo proteins (Probable). The CSC seems to act as recruitment hub for other proteins, such as the WASH



complex and TBC1D5 (Probable). Required for retrograde transport of lysosomal enzyme receptor IGF2R (PubMed:<a href="http://www.uniprot.org/citations/15078902"

target="\_blank">15078902</a>, PubMed:<a href="http://www.uniprot.org/citations/15078903" target="\_blank">15078903</a>). Required to regulate transcytosis of the polymeric immunoglobulin receptor (plgR-plgA) (PubMed:<a

href="http://www.uniprot.org/citations/15247922" target="\_blank">15247922</a>). Required for the endosomal localization of WASHC2A (indicative for the WASH complex) (PubMed:<a href="http://www.uniprot.org/citations/22070227" target="\_blank">22070227</a>). Required for the endosomal localization of TBC1D5 (PubMed:<a

href="http://www.uniprot.org/citations/20923837" target="\_blank">20923837</a>). Mediates retromer cargo recognition of SORL1 and is involved in trafficking of SORL1 implicated in sorting and processing of APP (PubMed:<a href="http://www.uniprot.org/citations/22279231" target="\_blank">22279231</a>). Involved in retromer-independent lysosomal sorting of F2R (PubMed:<a href="http://www.uniprot.org/citations/16407403" target="\_blank">16407403</a>). Involved in recycling of ADRB2 (PubMed:<a href="http://www.uniprot.org/citations/16407403" target="\_blank">16407403</a>). Involved in recycling of ADRB2 (PubMed:<a href="http://www.uniprot.org/citations/21602791" target="\_blank">21602791</a>). Enhances the affinity of SNX27 for PDZ-binding motifs in cargo proteins (By similarity).

**Cellular Location** 

Cytoplasm. Endosome membrane; Peripheral membrane protein

{ECO:0000250|UniProtKB:P40336}. Early endosome Note=Localizes to tubular profiles adjacent to endosomes (PubMed:15078903). Predominantly found in early not late endosomes (By similarity). {ECO:0000250|UniProtKB:P40336}

# KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## KD-Validated Anti-VPS26 Rabbit Monoclonal Antibody - Images





Western blotting analysis using anti-VPS26 antibody (Cat#62728). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-VPS26 antibody (Cat#62728, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-VPS26 antibody (Cat#62728). VPS26 expression in wild type (WT) and VPS26 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-VPS26 antibody (Cat#62728, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).



Flow cytometric analysis of VPS26 expression in HepG2 cells using anti-VPS26 antibody (Cat#62728, 1:2,000). Green, isotype control; red, VPS26.



Immunocytochemical staining of HepG2 cells with anti-VPS26 antibody (Cat#62728, 1:1,000). Nuclei were stained blue with DAPI; VPS26 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.