

VPS53 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat VPS53 (Vacuolar protein sorting 53, HCCS1)

Instruction Manual

Catalog Number	PK-AB718-4593
Synonyms	VPS53 Antibody: Vacuolar protein sorting 53, HCCS1
Description	The sorting of acid hydrolases to lysosomes rely on mannose 6-phosphate receptors that cycle between the trans-Golgi network (TGN) and endosomes. The maintenance of this cycle requires the function of the mammalian Golgi-associated retrograde protein (GARP) complex which is composed of three subunits: VPS52, VPS53, and VPS54. Depletion of any of these three proteins, such as by RNAi, impairs the retrograde transport of multiple TGN proteins. VPS53 was identified as an HIV dependency factor (HDF) and plays a role in viral entry to the cell, suggesting that VPS53 may be an important drug target in HIV treatment. At least five isoforms of VPS53 are known to exist.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	VPS53 antibody was raised in rabbits against an 18 amino acid peptide from near the carboxy terminus of human VPS53.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, ICC, IF Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. VPS53 antibody can be used for detection of VPS53 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 2.5 µg/mL.
Images	Available upon request.
References	Pfeffer SR. Targeting of proteins to the lysosome. <i>Curr. Top. Microbiol. Immunol.</i> 1991; 170:43-65. Liewen H, Meinhold-Heerlein I, Oliveira V, et al. Characterization of the human GARP (Golgi associated retrograde protein) complex. <i>Exp. Cell Res.</i> 2005; 306:22-34. Perez-Victoria FJ, Mardones GA, and Bonifacino JS. Requirement of the human GARP complex for mannose 6-phosphate-receptor-dependent sorting of cathepsin D to lysosomes. <i>Mol. Biol. Cell</i> 2008; 19:2350-62. Brass AL, Dykxhoorn DM, Benita Y, et al. Identification of host proteins required for HIV infection through a functional genomic screen. <i>Science</i> 2008; 319:921-6.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4593P; VPS53 Peptide Cat. No. PK-AB718-1210; 293 Cell Lysate

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