

Basic Information

Product Name	Anti-Villin 1/VIL1 Antibody	
Gene Name	VIL1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Villin, different from the related mouse sequence by three amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	93 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

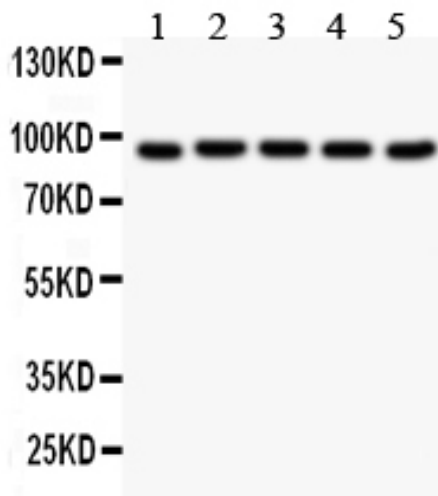
Background Information

Villin is known as VIL1. This gene encodes a member of a family of calcium-regulated actin-binding proteins. This protein represents a dominant part of the brush border cytoskeleton which functions in the capping, severing, and bundling of actin filaments. Two mRNAs of 2.7 kb and 3.5 kb have been observed; they result from utilization of alternate poly-adenylation signals present in the terminal exon. In vertebrates, the villin proteins help to support the microfilaments of the microvilli of the brush border. It may play a role in cell plasticity through F-actin severing.

Reference

Anti-Villin 1/VIL1 Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of Villin 1/VIL1 using anti-Villin 1/VIL1 antibody (PB9457). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Intestine tissue lysates,

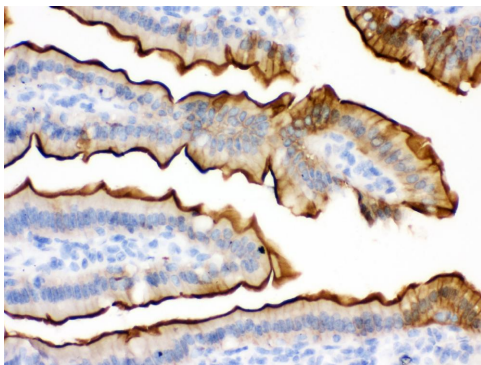
Lane 2: Mouse Kidney tissue lysates,

Lane 3: RH35 whole cell lysates,

Lane 4: HEPG2 whole cell lysates,

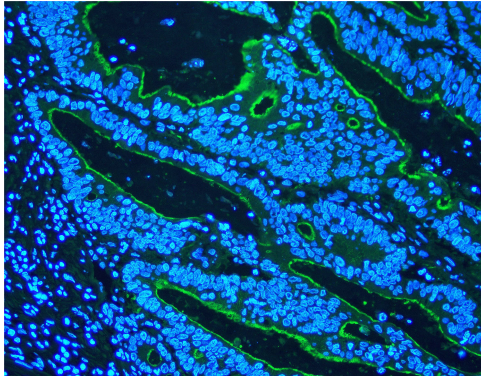
Lane 5: MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Villin 1/VIL1 antigen affinity purified polyclonal antibody (PB9457) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Villin 1/VIL1 at approximately 93 kDa. The expected band size for Villin 1/VIL1 is at 93 kDa.

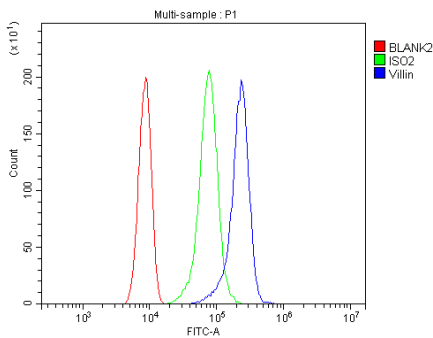


IHC analysis of Villin 1/VIL1 using anti-Villin 1/VIL1 antibody (PB9457).

Villin 1/VIL1 was detected in a paraffin-embedded section of mouse intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Villin 1/VIL1 Antibody (PB9457) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

**IF analysis of Villi using anti- Villi antibody (PB9457)**

Villi was detected in paraffin-embedded section of human rectal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/mL rabbit anti- Villi Antibody (PB9457) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

**Flow Cytometry analysis of Caco-2 cells using anti-Villin 1/VIL1 antibody (PB9457).**

Overlay histogram showing Caco-2 cells stained with PB9457 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Villin 1/VIL1 Antibody (PB9457) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.