For Research Use Only

# Villin Polyclonal antibody

Catalog Number:16488-1-AP Featured Product 16 Publications

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## Basic Information

Catalog Number:
16488-1-AP

Concentration:
700 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG9610

GenBank Accession Number:
BC017303

GeneID (NCBI):
7429

UNIPROT ID:
P09327

Full Name:
villin 1

Calculated MW:
827aa,93 kDa; 826aa,93 kDa

Observed MW:
93 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:2500-1:10000
IF-P 1:50-1:500
IF-Fro 1:200-1:800
IF/ICC 1:50-1:500

## Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, pig, zebrafish

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : mouse kidney tissue, mouse colon tissue, mouse liver tissue

IP : mouse kidney tissue,

IHC : mouse small intestine tissue, human colon cancer tissue

IF-P : mouse small intestine tissue,

IF-Fro : mouse small intestine tissue,

IF/ICC : COLO 320 cells,

## Background Information

Villin 1 (VIL1) is a 95-kd F-actin bundling and severing protein and its expression is restricted to epithelial cells with a brush border, like epithelial cells of the intestinal mucosa, gall bladder, renal proximal tubules and ductuli efferentes of the testis. VIL1 has been reported to be an epithelial cell-specific anti-apoptotic protein, and to have an important function in regulating actin dynamics, cell morphology, epithelial-to-mesenchymal transitions, cell migration and cell survival. In addition, VIL1 is a useful diagnostic marker for of various cancer, like cervical and endometrial adenocarcinomas, renal cell carcinoma. VIL1 was recently identified as a novel biomarker predictive for postoperative recurrence and poorer prognosis of high serum AFP associated HCC.

## Notable Publications

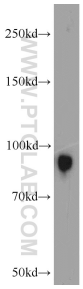
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Qianjin Zhang | 36436756 | Cell Mol Gastroenterol Hepatol | IF |
| Zhixin Liu | 33783986 | Clin Transl Med | IF |
| Qi-Yue Yang | 35696443 | PLoS Pathog | IF |

## Storage

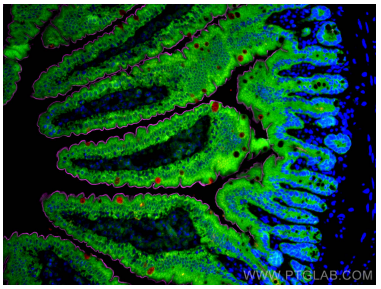
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

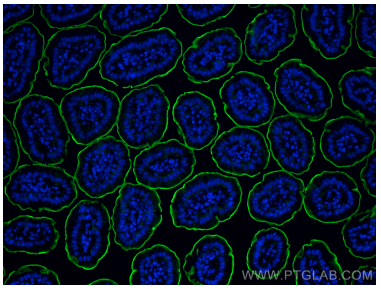
## Selected Validation Data



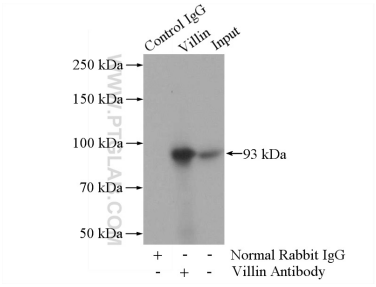

mouse kidney tissue were subjected to SDS PAGE followed by western blot with 16488-1-AP (Villin antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



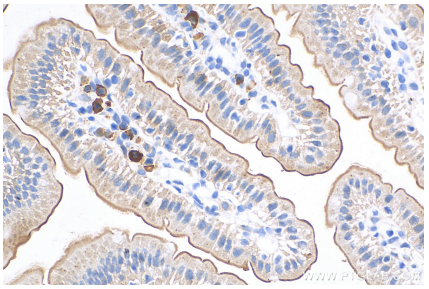
Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using Villin antibody (16488-1-AP) at dilution of 1:200 and CoraLite®647-conjugated AffiniPure F(ab, CoraLite® Plus 488 PIGR antibody (CL488-22024, green), CoraLite® Plus 594 ZG16 antibody (CL594-67389, Clone: 1A7B9, red).



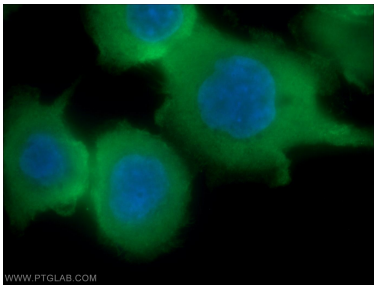
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse small intestine tissue using Villin antibody (16488-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



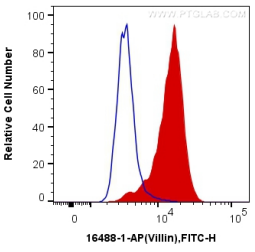

IP result of anti-Villin (IP:16488-1-AP, 4ug; Detection:16488-1-AP 1:300) with mouse kidney tissue lysate 4000ug.



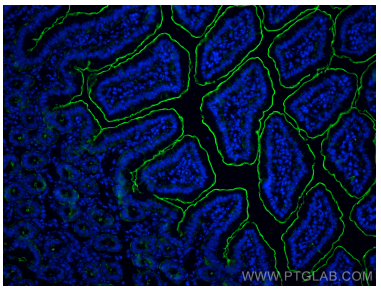
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 16488-1-AP (Villin antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



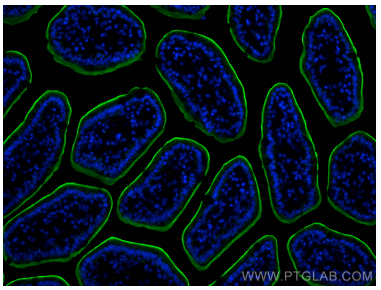
Immunofluorescent analysis of COLO 320 cells using 16488-1-AP (Villin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Villin (16488-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse small intestine tissue using Villin antibody (16488-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using Villin antibody (16488-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).