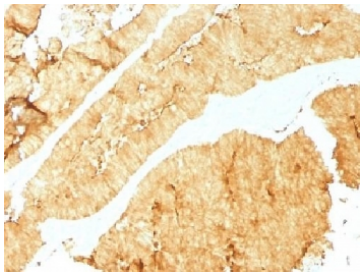
Villin Antibody / VIL1 [clone VIL1/1325] (V3369)

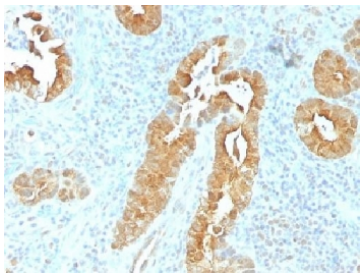
Catalog No.	Formulation	Size
V3369-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3369-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3369SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

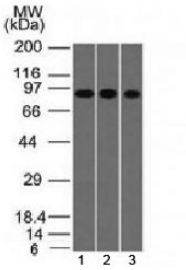
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	VIL1/1325
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
UniProt	P09327
Localization	Cytoplasmic and cell surface
Applications	Western Blot : 1-2ug/ml for 60 min at RT Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This Villin antibody is available for research use only.



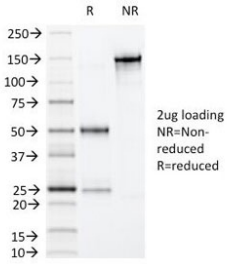
IHC testing of FFPE human colon with Villin antibody (clone VIL1/1325). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human rectum tissue with Villin antibody (clone VIL1/1325). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human 1) A549, 2) HepG2 and 3) HCT-116 cell lysate with Villin antibody (clone VIL1/1325). Expected molecular weight ~93 kDa.



SDS-PAGE Analysis of Purified, BSA-Free Villin Antibody (clone VIL1/1325). Confirmation of Integrity and Purity of the Antibody.

Description

Villin (VIL1) is an epithelial cell-specific Ca2+-regulated actin-modifying protein that modulates the reorganization of microvillar actin filaments. Plays a role in the actin nucleation, actin filament bundle assembly, actin filament capping and severing. Binds phosphatidylinositol 4,5-bisphosphate (PIP2) and lysophosphatidic acid (LPA); binds LPA with higher affinity than PIP2. Binding to LPA increases its phosphorylation by SRC and inhibits all actin-modifying activities. Binding to PIP2 inhibits actin-capping and -severing activities but enhances actin-bundling activity. Regulates the intestinal epithelial cell morphology, cell invasion, cell migration and apoptosis. Protects against apoptosis induced by dextran sodium sulfate (DSS) in the gastrointestinal epithelium. Appears to regulate cell death by maintaining mitochondrial integrity. Enhances hepatocyte growth factor (HGF)-induced epithelial cell motility, chemotaxis and wound repair. Upon S.flexneri cell infection, its actin-severing activity enhances actin-based motility of the bacteria and plays a role during the dissemination. [UniProt]

Application Notes

The stated application concentrations are suggested starting points. Titration of the Villin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 179-311 from the human protein were used as the immunogen for this Villin antibody.

Storage

Store the Villin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).