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**Product Name: Villin-1 (1Y7) Rabbit Monoclonal Antibody****Catalog #: AMRe19796**

For research use only.

**Summary**

<b>Description</b>	Recombinant rabbit monoclonal antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,FC
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	0.5mg/ml. The concentration of this product may be batch-dependent.
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% protective protein.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:2000-1:20000,FC 1:10-1:100
<b>Molecular Weight</b>	93kDa

**Antigen Information**

<b>Gene Name</b>	VIL1
<b>Alternative Names</b>	VIL; VIL1; Villin1;
<b>Gene ID</b>	7429.0
<b>SwissProt ID</b>	P09327
<b>Immunogen</b>	A synthetic peptide of human Villin

**Background**

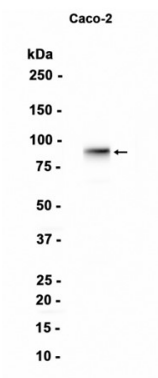
Ca(2+)-regulated actin-binding protein. Epithelial cell-specific Ca(2+)-regulated actin-modifying protein that modulates the reorganization of microvillar actin filaments. Plays a role in the actin nucleation, actin filament bundle assembly, actin filament

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.

## Research Area

Signal Transduction

## Image Data



Western blot analysis of extracts from Caco-2 cells using Villin-1 (1Y7) Rabbit Monoclonal Antibody at 1:1000.