

## Villin (PT0094R) rabbit mAb

Catalog No: YM7028

**Reactivity:** Human; Mouse; (predicted: Pig; Bovin)

**Applications:** IHC;WB; ELISA

Target: Villin

Gene Name: VIL1

Protein Name: Villin-1

**Human Gene Id:** 7429

**Human Swiss Prot** 

No:

Immunogen: Synthesized peptide derived from human Villin AA range:150-250

**Specificity:** This antibody detects endogenous levels of Villin

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Source: Monoclonal, Rabbit IgG1, Kappa

P09327

**Dilution:** IHC 1:100-500, WB 1:500-1000, ELISA 1:5000-20000

**Purification:** Recombinant Expression and Affinity purified

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 93kD

**Background :** 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. [provided by

RefSeq, Jul 2008],



#### **Function:**

domain:Consists of a large core fragment, the N-terminal portion, and a small headpiece, the C-terminal portion. The headpiece binds F-actin strongly in both the presence and absence of calcium.,function:Ca(2+)-regulated actin-binding protein.,similarity:Belongs to the villin/gelsolin family.,similarity:Contains 1 HP (headpiece) domain.,similarity:Contains 6 gelsolin-like repeats.,subunit:Monomer.,tissue specificity:Major component of microvilli of intestinal epithelial cells and kidney proximal tubule cells.,

# Subcellular Location:

Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle. Cell projection, microvillus. Cell projection, filopodium tip . Cell projection, filopodium . Relocalized in the tip of cellular protrusions and filipodial extensions upon infection with S.flexneri in primary intestinal epithelial cells (IEC) and in the tail-like structures forming the actin comets of S.flexneri. Redistributed to the leading edge of hepatocyte growth factor (HGF)-induced lamellipodia (By similarity). Rapidly redistributed to ruffles and lamellipodia structures in response to autotaxin, lysophosphatidic acid (LPA) and epidermal growth factor (EGF) treatment.

### **Expression:**

Specifically expressed in epithelial cells. Major component of microvilli of intestinal epithelial cells and kidney proximal tubule cells. Expressed in canalicular microvilli of hepatocytes (at protein level).

## **Products Images**