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# VIL1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI15181

## Product Information

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| **Application** | WB |
| **Primary Accession** | P09327 |
| **Other Accession** | NM_007127, NP_009058 |
| **Reactivity** | Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine |
| **Predicted** | Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 92695 |

## Additional Information

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| **Gene ID** | 7429 |
| **Alias Symbol** | D2S1471, VIL |
| **Other Names** | Villin-1, VIL1, VIL |
| **Format** | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. |
| **Reconstitution & Storage** | Add 50 ul of distilled water. Final anti-VIL1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| **Precautions** | VIL1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | VIL1 |
| **Synonyms** | VIL |
| **Function** | 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 |

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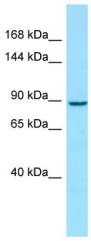
| | apoptosis induced by dextran sodium sulfate (DSS) in the gastrointestinal epithelium. Appears to regulate cell death by maintaining mitochondrial integrity. Enhances hepatocyte growth factor (HGF)-induced epithelial cell motility, chemotaxis and wound repair. Upon S.flexneri cell infection, its actin-severing activity enhances actin-based motility of the bacteria and plays a role during the dissemination. |
| **Cellular Location** | Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle. Cell projection, microvillus Cell projection, filopodium tip. Cell projection, filopodium. Note=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. |
| **Tissue Location** | 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). |

## References


Arpin M.,et al.J. Cell Biol. 107:1759-1766(1988).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Pringault E.,et al.EMBO J. 5:3119-3124(1986).


## Images




WB Suggested Anti-VIL1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Liver


Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.