# Anti-Human Villin 1 Antibody, Polyclonal

### **Antibodies**

Rabbit polyclonal antibody against human

villin

Catalog #100-1066 100 μL



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### **Product Description**

This rabbit polyclonal antibody reacts with villin 1, a calcium-regulated protein expressed in epithelial cells. It is organized into six conserved domains, which make up the villin core, and a C-terminal headpiece domain, which contains an F-actin binding site. Villin 1 is an important player in the reorganization of microvillar actin filaments and is involved in actin nucleation, polymerization, and severing. It is a key component in the growth and development of intestinal epithelial cells, regulating cell morphology, growth, and apoptosis. Villin 1 has been implicated as a predictive factor in some adenocarcinomas of the endocervix, colon, and lungs. Abnormal villin expression has also been associated with biliary atresia and cholestasis.

Target Antigen Name: Villin1

Alternative Names: D2S1471, VIL1, VIL

Gene ID: 7429

Species Reactivity: Human

Host Species: Rabbit

Clonality: Polyclonal

Clone: Not applicable

Isotype: Not applicable

Immunogen: Full-length fusion protein

Conjugate: Unconjugated

#### **Applications**

Verified: ICC/IF

Reported: ICC/IF, IHC, WB

Special Applications: This antibody clone has been verified for labeling villin 1-positive enterocytes in human intestinal organoids

grown using the STEMdiff™ Intestinal Organoid Kit (Catalog #05140).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: Phosphate-buffered saline, pH 7.4, containing 0.05% sodium azide and 40% glycerol

**Purification:** The antibody was purified by affinity chromatography.

Stability and Storage: Product stable at -20°C when stored undiluted. Stable until expiry date (EXP) on label.

Directions for Use: The suggested use of this antibody is: ICC/IF, 2.5 µg/mL; IHC, 1:25 - 1:100; WB, 1:200 - 1:1000. It is

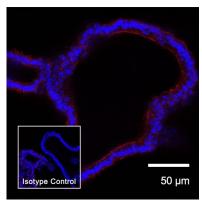
recommended that the antibody be titrated for optimal performance for each application.

## **Antibodies**

#### Anti-Human Villin 1 Antibody, Polyclonal



#### Data



H9 human intestinal organoids were cultured using STEMdiff™ Intestinal Organoid Kit (Catalog # 05140), then fixed and labeled with Anti-Human Villin 1 Antibody, Polyclonal, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 568 (Catalog #100-1083). Nuclei were counter-stained with DAPI (blue). Inset shows cells labeled with a rabbit IgG isotype control antibody, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 568 (with DAPI staining).

### **Related Products**

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

#### References

- 1. Jing B et al. (2020) Establishment and application of peristaltic human gut-vessel microsystem for studying host-microbial interaction. Front Bioeng Biotechnol 8: 272. (ICC/IF)
- 2. Jalili-Firoozinezhad S et al. (2018) Modeling radiation injury-induced cell death and countermeasure drug responses in a human Gut-on-a-Chip. Cell Death Dis 9(2): 223. (IF)
- 3. Paredes J et al. (2018) Establishment of three novel cell lines derived from African American patients with colorectal carcinoma: A unique tool for assessing racial health disparity. Int J Oncol 53(4): 1516–28. (WB)
- 4. Shillingford NM et al. (2015). Villin immunohistochemistry is a reliable method for diagnosing microvillus inclusion disease. Am J Surg Pathol 39(2): 245–50. (IHC)

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