



Diagnostic  
BioSystems

Launches

# VILLIN ANTIBODY

NEW

Mouse Monoclonal Antibody

Antibody Type: Mouse Monoclonal

Regulatory Status: IVD

Clone: 1D2C3

Cellular Localization: Apical  
membranous (brush border)  
/Cytoplasmic

Catalog Number: MOB590/PDM590

**Formalin fixed paraffin embedded  
human small intestine stained with Villin**

Villin is one of the gelsolin family of calcium regulated actin binding proteins. Normally expressed in the brush border of epithelial cells lining the gastrointestinal tract, hepatobiliary tract and renal proximal convoluted tubules. In colorectal carcinoma, Villin is highly expressed. In practice, Villin can be included in the panel used for metastatic carcinoma to detect colorectal origin.

#### Reference:

1. Onozato, D., et al. 2018. Generation of intestinal organoids suitable for pharmacokinetic studies from human induced pluripotent stem cells. Drug metab. Dispos. 46: 1572-1580.
2. Sim, H., et al. 2020. Iroquois homeobox protein 2 identified as a potential biomarker for parkinson's disease. int. J. Mol. Sci. 21:3455.
3. Diego Arango, et al. Villin expression is frequently lost in poorly differentiated colon cancer. Am J Pathol. 2012 Apr; 180(4): 1509-21

## Why Villin

- Important marker for confirming the site of origin of metastatic carcinoma
- Loss of villin immunostaining of colorectal carcinoma is associated with poor differentiation and survival villin positive in varying percentage:
  - Colorectal carcinoma (82 - 84.9%)
  - Gastrointestinal neuroendocrine tumors (72%)
  - Endocervical adenocarcinoma (93.3%)