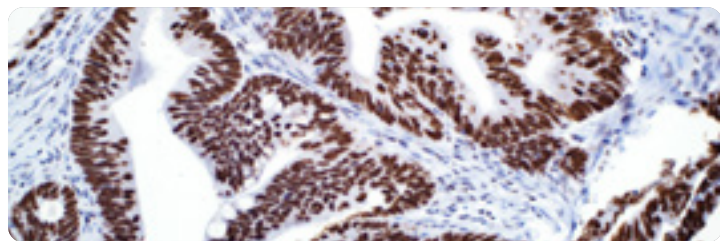


**Above:**  
Cadherin-17 (SP183)

**View more at:**  
[cellmarque.com/specialties](http://cellmarque.com/specialties)



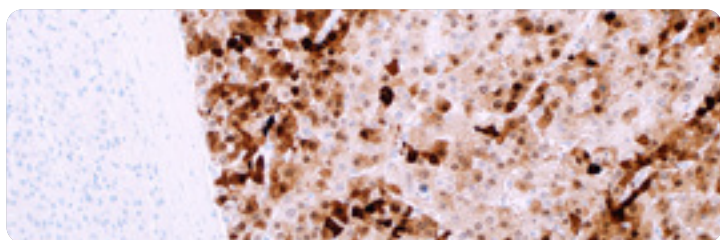
## Cell Marque™ Tissue Diagnostics Gastrointestinal (GI) Pathology



### **SATB2 (EP281)**

#### **Cat. No. 384R-1**

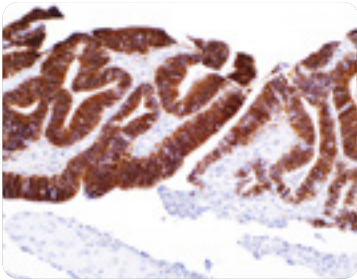
Special AT-rich sequence-binding protein 2 (SATB2) has been reported to identify, in combination with CK20, almost all colorectal carcinomas, including poorly differentiated colorectal carcinomas. Upper gastrointestinal (GI) carcinomas and pancreatic ductal carcinomas are usually negative for SATB2, and ovarian carcinomas, lung adenocarcinomas, and adenocarcinomas from other origin are rarely positive for SATB2. Therefore, SATB2 is a good marker for identifying a carcinoma of colorectal origin when working on a tumor of unknown primary. More recently, it has been shown in literature that SATB2 is a sensitive marker for tumors with osteoblastic differentiation.



### **Heat Shock Protein 70 (EP377)**

#### **Cat. No. 460R-1**

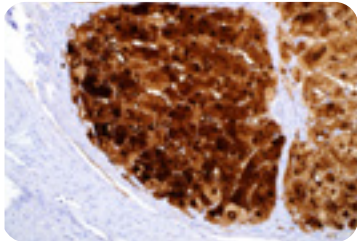
The Heat Shock Protein 70 family of highly conserved chaperone proteins increase in expression upon exposure to stress factors such as temperature shock, hypoxia, oxidative stress, and pH change. This promotes cell survival by repairing misfolded proteins and preventing protein aggregates, among other functions. Likewise, tumor cells can use this mechanism to confer a survival advantage as demonstrated in Heat Shock Protein 70 overexpression in hepatocellular carcinoma.



## Cadherin-17 (SP183)

### Cat. No. 378R-1

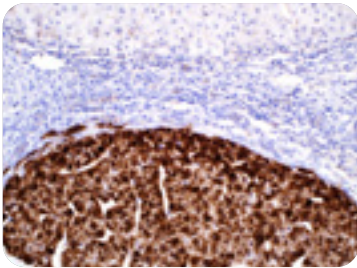
Cadherin-17 is expressed in many adenocarcinomas which includes colorectal, pancreatic, and gastric. Cadherin-17 is more commonly used in colorectal adenocarcinomas due to its diffuse and strong staining. In other adenocarcinomas, such as stomach, pancreas, and bile duct, cadherin-17 can be visualized as focal or scattered. Cadherin-17 can be complimentary to E-cadherin as they are both expressed in the intestinal mucosa.



## Arginase-1 (SP156)

### Cat. No. 380R-1

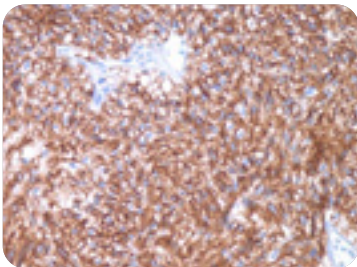
Arginase-1 can be used with other antibodies to aid in the distinction of benign versus malignant liver tumors in small biopsies. Hepatocellular carcinoma (HCC) is the most common primary malignant tumor of the liver accounting for an estimated 70-80% of total liver cancers worldwide; therefore, arginase-1 can prove to be a reliable marker for the differentiation of liver neoplasms, most importantly HCC.



## Glutamine Synthetase (GS-6)

### Cat. No. 389M-1

Glutamine synthetase (GS) catalyzes the synthesis of glutamine from glutamate and ammonia in the mammalian liver. In normal liver, GS expression is seen in centrilobular (zone 3) hepatocytes, but not in mid-zone (zone 2) or periportal (zone 1) hepatocytes. Glutamine, the end product of GS activity, is the major energy source of tumor cells. Based on findings from experimental hepatocarcinogenesis, GS-positive tumor cells are believed to be derived from GS-positive hepatocytes. Thus, anti-GS has been suggested as a marker for hepatocellular carcinoma (HCC).



## DOG1 (SP31)

### Cat. No. 244R-1

DOG1 has many significant functions such as regulation of the cholinergic activity of gastrointestinal smooth muscle and regulation of both the survival and proliferation of cells. Anti-DOG1 antibody has been shown to be useful in the identification of gastrointestinal stromal tumors (GIST).

**For full references and product details please see the product insert.**

The products herein are intended for laboratory use in the detection of their respective proteins in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. These products cannot be used for cancer diagnosis or decisions regarding treatment pathways.

Toll Free: 800-665-7284  
Phone: 916-746-8900  
Fax: 916-746-8989  
Email: [service@cellmarque.com](mailto:service@cellmarque.com)  
[www.cellmarque.com](http://www.cellmarque.com)

For sizes and availability please visit [www.cellmarque.com](http://www.cellmarque.com) or contact your Technical Consultant.

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MilliporeSigma  
400 Summit Drive  
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