



Algorithm of IHC antibody panels

Part 2: Site-specific biomarker panel – Gastrointestinal

Differential diagnosis	Most commonly used biomarkers
Esophageal neoplasms	CK7, CK20, CDX2, MLH1, MSH2, MSH6, PMS2 , PD-L1, MUC2, p53, p63, CK5/6, CK14, p16
Gastric neoplasms	CK7, CK20, CDX2, MLH1, MSH2, MSH6, PMS2 , MUC1, MUC2, MUC5AC, p53, Ki67 , Gastrin, CD34, ASMA , S100B, HER2 Desmin, PD-L1, CD20, CD79a, PAX5, CD5, CD10, CD23
Hepatocellular neoplasms	HepPar-1, Arginase-1, CEA, CD10, CK7 , CK19, CK20, CDX2 , Glypican-3, SALL4, CD34 , beta-Catenin, AFP, EMA, CK17
Pancreatic neoplasms	CK7, CK20, CDX2, MLH1, MSH2, MSH6, PMS2 , CK19, SYP, CGA, CD56, Ki67 , CK8/18, EMA, CEA, SMAD4, beta-Catenin, MUC1, MUC2, MUC5AC
Small Intestinal neoplasms	CK20, CDX2, CK7, MLH1, MSH2, MSH6, PMS2
Colorectal/anal neoplasms	CK20, CDX2, CK7 , MUC2, MLH1, MSH2, MSH6, PMS2, SATB2 , p53, Cadherin 17, CEA, CK5/6, CK14, p63, BRAFv600E, HER2, beta-Catenin, GCDFP-15, p16
Neuroendocrine neoplasms	INSM1, CGA, SYP, CD56, Ki67 , Gastrin
GIST	DOG1, CD117, CD34, ASMA , S100B, Desmin
Immune-mediated/autoimmune	CD3, PD-L1, IgG, IgG4, CD117
Infectious	CMV, H Pylori , HSV1, HSV2, EBER, p16/HPV, Treponema Pallidum

*The list above does not include all differential diagnoses and related biomarkers. Those **bolded** are the most commonly used biomarkers.



Gastrointestinal biomarkers

Most commonly used biomarkers

MLH1, MSH2, MSH6, PMS2, H Pylori, CD117 (c-KIT), DOG1, CD34, ASMA, CK7, CK20, CDX2, SATB2, Ki67

More gastrointestinal biomarkers available from Sakura Finetek USA

AFP, beta-Catenin, Cadherin 17, CD3, CD5, CD10, CK19, CD20, CD23, CD56, CD79a, CD117, CEA, CGA, CK5, CK5/6, CK14, CK8/18, CK17, CK19, CMV, Desmin, EBER, EMA, Gastrin, GCDPF-15, HepPar-1, HER2, HSV1, HSV2, IgG4, MUC1, MUC2, MUC5AC, p16, p53, p63, PAX5, PD-L1, S100B, SMAD4, Synaptophysin, Treponema Pallidum