



Algorithm of IHC antibody panels

Part 2: Site-specific biomarker panel – Breast

Differential diagnosis	Most commonly used biomarkers
Breast carcinoma	GATA3, Mammaglobin, GCDFP-15, ER , CK5/6, CK14, CK8/18, CK7, CK20
▪ DCIS vs. Infiltrating ductal carcinoma	p40, p63, Myosin, Calponin, ASMA, CD10, p40/Myosin
▪ Prognostic/Predictive	ER, PR, HER2 , PD-L1, Ki67
▪ Ductal vs. Lobular adenocarcinoma	E-Cadherin, p120
▪ Metastatic breast carcinoma in Sentinel Nodes	CK7/CK19, pan CK (AE1/AE3/DC-10), AE1/AE3
▪ Triple-Negative Breast carcinoma	TRPS1, ER, PR, HER2
▪ Atypical ductal hyperplasia vs Usual ductal hyperplasia	CK5, CK7, CK14, CK18, CK5/14/p63/CK7/18, CK HMW/p63/CK7/8/18
Salivary Gland Type Neoplasms	p63, p40, CK7, CK14, CK8/18, CD117, ER, PR, Ki67 , GCDFP-15, Calponin, Myosin
Neuroendocrine Neoplasms	INSM1, Chromogranin A, Synaptophysin, CD56, Ki67
Hematolymphoid Neoplasms	CD45, CD3, CD20, CD10, BCL6, EBER, PAX5, BCL2
Mesenchymal Neoplasms	S100B, SOX10, ERG, CD31, CD34, Podoplanin (D2-40), ASMA, Desmin

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



Breast biomarkers

Most commonly used biomarkers

ER, PR, HER2, Ki67

More breast biomarkers available from Sakura Finetek USA

AE1/AE3, ASMA, BCL2, BCL6, Calponin, CD3, CD10, CD20, CD31, CD34, CD45, CD56, CD117, Chromogranin A, CK5, CK5/6, CK7, CK8, CK14, CK7/CK19, CK18, CK8/18, CK20, Desmin, EBER, E-Cadherin, ER, ERG, GATA3, GCDFP-15, HER2, INSM1, Ki67, Mammaglobin, Myosin, p40, p40/Myosin, p53, p63, p120, panCK (AE1/AE3/DC-10), PAX5, PD-L1, Podoplanin (D2-40), PR, S100B, SOX10, Synaptophysin, TRPS1