



Algorithm of IHC antibody panels

Part 2: Site-specific biomarker panel – Lung

Differential diagnosis	Most commonly used biomarkers
Lung carcinoma	TTF1, Napsin A, CK7, CK20, CK5/6, p40, DUO p40/Napsin A, DUO CK5/6/TTF1 , Calretinin, Podoplanin (D2-40), WT-1, BAP1, MTAP
▪ Adenocarcinoma vs. Squamous cell carcinoma	TTF1, Napsin A, p40, CK5/6, DUO p40/Napsin A, DUO CK5/6/TTF1 , p63
▪ Prognostic/Predictive	PD-L1, ALK, ROS1
▪ Adenocarcinoma vs. Mesothelioma	Calretinin, CK5/6 , WT-1, Podoplanin (D2-40), BAP1, MTAP, EpCAM, CEA, CD15, TTF-1
Neuroendocrine Neoplasms (including Small cell lung carcinoma)	Synaptophysin, Chromogranin A, CD56, TTF-1 , Ki67, INSM1
Salivary Gland Type Neoplasms	AE1/AE3, panCK (AE1/AE3/DC10), p40, p63, EMA, S100B, SOX10, ASMA, Calponin, Myosin, CD117
Hematolymphoid Neoplasms	CD45, CD3, CD20, CD10, BCL6, EBER, PAX5, BCL2, CD1a, CD207 (Langerin)
Mesenchymal Neoplasms	S100B, SOX10, Melan A, Melanosome (HMB45), ERG, CD31, CD34, Podoplanin (D2-40), ASMA, Desmin, Caldesmon

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

Lung biomarkers



Most commonly used biomarkers

CK5/6, Napsin A, p40, TTF1

More pulmonary biomarkers available from Sakura Finetek USA

AE1/AE3, ALK, ASMA, BCL2, BCL6, Caldesmon, Calponin, Calretinin, CD1a, CD3, CD10, CD15, CD20, CD31, CD34, CD45, CD56, CD117, CEA, Chromogranin A, CK5/6, CK7, CK20, Desmin, DUO p40/Napsin A, DUO CK5/6/TTF1, EBER, EMA, EpCAM, ERG, Ki67, Melan A, Melanosome (HMB45), Myosin, Napsin A, p40, p63, panCK (AE1/AE3/DC10), PAX5, PD-L1, Podoplanin (D2-40), S100B, SOX10, Synaptophysin, TTF1, WT1