Algorithm of IHC antibody panels

Part 2: Site specific biomarker panel – Dermatopathology

Differential diagnosis	Most commonly used biomarkers
Melanoma (including biomarkers for sentinel lymph node)	**SOX10, Melan A, Melanosome (HMB45),** Tyrosinase, **S100B**, BAP1, CD63 (NKI/C3), pan-CK/S100B, pan-Melanoma (Melan A, Melanosome, Tyrosinase), Melan A/**Ki67** (dual color), BRAFv600E, PRAME
Paget Disease	CK7, CK20, CDX2, ER, MUC1, GCDFP-15, HER2
Sebaceous tumor	EMA, **EpCAM**, GCDFP-15, MLH1, MSH2, MSH6, PMS2, AR, p53, Ki67
Eccrine gland tumor	Tumors luminal (CK7, CEA, EMA) and myoepithelial (CK5, CK14, S100, SOX10), p63, Beta-catenin
Basal cell Carcinoma/Squamous cell carcinoma	EpCAM, CK5/6, CK5, CK14, p63, p40, pan-CK, CK AE1/AE3
Autoimmune and Immune-Mediated Diseases (AIM)	FITC-C3, FITC-Fibrinogen, FITC-IgG, FITC-IgA, FITC-IgM
Infectious	HSV1, HSV2, CMV, Treponema Pallidum, VZV
Others	CD34, Factor XIIIa, CD3, CD31, CD68, Ki67, ASMA, Desmin, CD117, Podoplanin (D2-40), CK, CD43, CD63 (NKI/C3), CD163, CD20, CD4, CD8, and other biomarkers

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

Dermatopathology biomarkers

Most commonly used biomarkers	More dermatopathology biomarkers available from Sakura Finetek USA
SOX10, Melan A, Melanosome (HMB45), S100B, EpCAM, Ki67	ASMA, Beta-catenin, CD3, CD4, CD8, CD20, CD31, CD34, CD43, CD63, CD68, CD117, CD163, CDX2, CEA, CK (AE1/AE3), pan-CK, CK5, CK5/6, CK7, CK14, CK20, CMV, Desmin, DUO pan-CK/S100B, DUO Melan A/Ki67, EMA, ER, Factor XIIIa, FITC-C3, FITC-Fibrinogen, FITC-IgA, FITC-IgG, FITC-IgM, GCDFP-15, HER2, HSV1, HSV2, MLH1, MSH2, MSH6, MUC1, pan-Melanoma (Melan A, Melanosome, Tyrosinase), p40, p53, p63, PMS2, Podoplanin (D2-40), PRAME, Treponema Pallidum, Tyrosinase