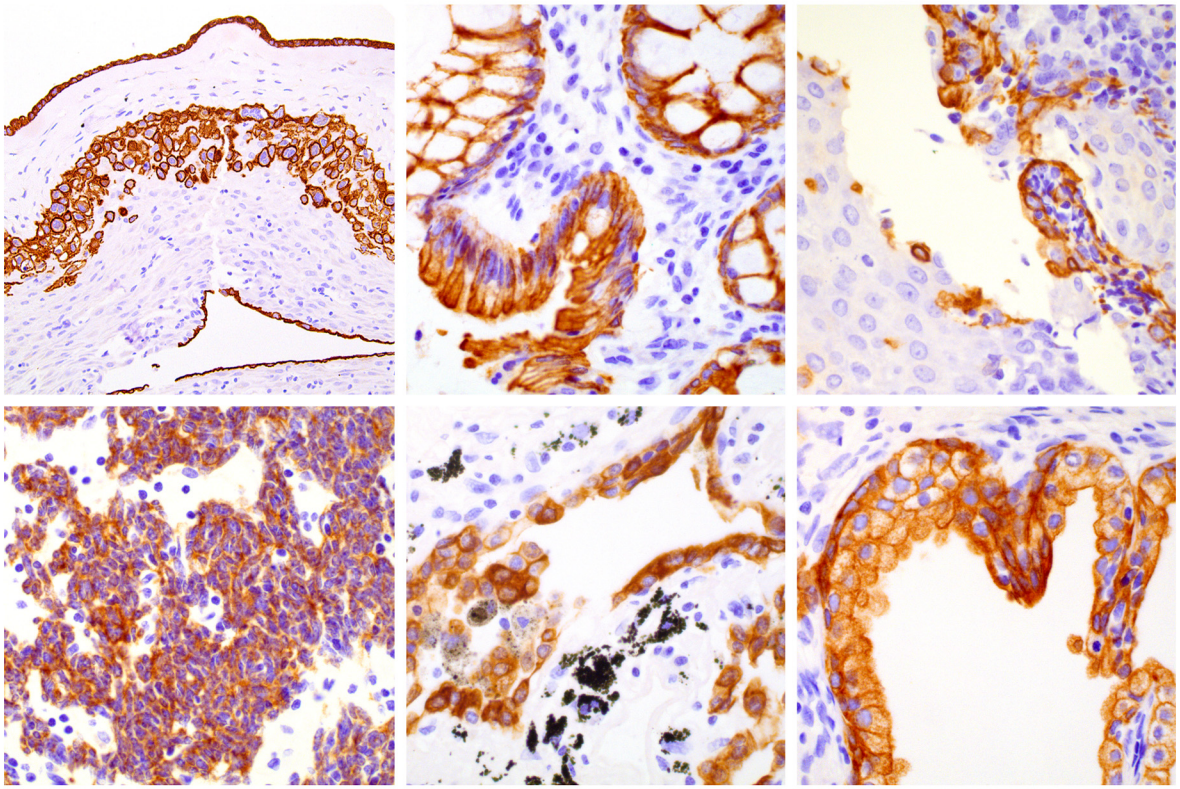
Cytokeratin (OSCAR clone)

Cytokeratin is an intermediate filament that forms the cytoskeleton. They are commonly divided based on molecular weight; high molecular weight (HMW) cytokeratins being expressed in basal cells and stratified epithelium (e.g. urothelium, skin) whereas low molecular weight (LMW) cytokeratins are primarily found in simple epithelium (mucosal lining cells, endocrine glands).

Positive control tissues: Skin, thymus, placenta

Vendor, Catalogue	Instrument	Detection	Antibody Concentration	Pre-treatment
Cell Marque, CX255	Bondmax	Polymer Refine kit, Vision DS9800	1:50 for 20 mins	Enzyme 3 for 10 mins



Applications:
The most widely used pan-keratin antibody is the AE1/AE3 cocktail. AE1 recognizes the acidic cytokeratins 10, 14, 15, 16, and 19, whereas AE3 recognizes the basic cytokeratins 1, 2, 3, 4, 5, 6, and 8. Both antibodies recognize a mixture of high- and low-molecular-weight cytokeratins. The OSCAR MAb demonstrates a broad spectrum of cytokeratin reactivity and potentially has somewhat broader cytokeratin coverage than does the AE1/AE3 cocktail, although this may be laboratory dependent.

	Positive	Negative
Normal	Bile ducts, hepatocytes, bladder epithelium, breast ducts, bronchial epithelium, endometrium, follicular dendritic cells, epithelium of stomach, duodenum, ileum, colon, rectum, pancreas, ovarian surface epithelium, pancreatic acini, pituitary acini, pneumocytes, prostate, thyroid, basal layer of skin, apocrine and sweat glands.	Superficial layers of squamous epithelium, brain, lymphocytes, hematolymphoid cells, muscle, brain, nerves, endothelium
Neoplastic	Breast CA, TCC, RCC, lung adeno CA, lung small cell CA, lung squamous cell CA, endometrial CA, prostate CA, ovarian CA, HCC, colorectal CA, stomach CA, thyroid CA.	Melanoma, sarcoma, lymphoma, PNET / Ewings sarcoma, GIST

References:
Folpe AL, Cooper K. Best practices in diagnostic immunohistochemistry: pleomorphic cutaneous spindle cell tumors.Arch Pathol Lab Med. 2007 Oct;131(10):1517-24. Review.
Westfall DE, Folpe AL, Paner GP, Oliva E, Goldstein L, Alsabeh R, Gown AM, Amin MB. Utility of a Comprehensive Immunohistochemical Panel in the Differential Diagnosis of Spindle Cell Lesions of the Urinary Bladder.Am J Surg Pathol. 2008 Oct 20.
Bahrami A, Gown AM, Baird GS, Hicks MJ, Folpe AL.Aberrant expression of epithelial and neuroendocrine markers in alveolar rhabdomyosarcoma: a potentially serious diagnostic pitfall. Mod Pathol. 2008 Jul;21(7):795-806. Epub 2008 May 16.