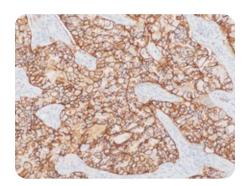


Cell Marque™ Tissue Diagnostics

Newly Released: Claudin-4, Ki-67, and More

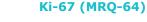


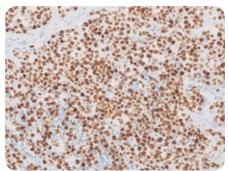
Claudin-4 (EP417)

The claudin-family proteins are a group of tight-junction membranous proteins responsible for paracellular molecular flow between adjacent cells of the epithelium.¹ In normal kidney, claudin-4 plays a key role in paracellular ion reabsorption.² Claudin-4 is expressed in most epithelial cells yet is absent in mesothelial cells, making it of great use in characterizing epithelial malignincies.³ Immunohistochemical identification of this antigen may help identify poorly differentiated lung adenocarcinoma from lesions of mesothelial origin.⁴ Likewise, identification of claudin-4 expression by IHC may be useful in characterizing breast and endometrial lesions.⁵,6

References: 1. Cong X, et al. *Journal of Cell Science* 2015; 128:2271-2286. 2. Hou J, et al. *Proc Natl Acad Sci USA* 2010; 107(42):18010-5. 3. Neesse A, et al. *Arch Biochem Biphys*; 2012; 524(1):64-70. 4. Ordoñez NG. *Anatomic Pathology* 2013; 139:611-619. 5. Abd-Elazeem MA, et al. *Ann Diagn Pathol.* 2015; 19(1):37-42. 6. Konecny GE, et al. *Gynecol Oncol.* 2008; 109(2):263-269.

t. No.
8R-14
8R-15
8R-16
8R-17
8R-18





Ki-67 (MRQ-64) is an antibody designed to target Ki-67 antigen-a nuclear protein encoded by the MKI67 gene whose presence correlates with G1, S, G2, and the mitotic phases of the cell cycle.¹ Though its specific role is largely postulated and still yet to be determined, Ki-67's presence during cellular division makes it an excellent target for labeling rapidly growing malignancies.² Given that its presence correlates with cell proliferation, the immunohistochemical labeling of Ki-67 antigen may be useful in characterizing a lesion's growth fraction. It has been demonstrated that identifying this antigen by IHC is useful in characterizing lesions of the breast, lymphoid cells, astrocytes, and uterus.³-9

References: 1. Scholzen T, et al. *J Cell Physiol.* 2000; 182(3):311-22. 2. Sun X, et al. *Chromosoma*. 2018; 127(2):175-186. 3. Abd-Elazeem MA, et al. *Annals of Diagnostic Pathology* 2015; 19:37-42. 4. Inwald EC, et al. *Breast Cancer Res Treat*. 2013; 139(2):539-552. 5. Ning J, et al. *J Cancer*. 2019; 10(12):2635-2642. 6. Broyde A, et al. *Am J Hematol*. 2009; 84(6):338-43. 7. Chuang SS, et al. *Am J Clin Path* 2007 128(4):558-64. 8. Shivaprasad NV, et al. *J Neurosci Rural Pract*. 2016 7(4):510-514. 9. Mayerhofer K, et al. *Acta Obstet Gynecol Scand*. 2004; 83(11):1085-8.

Description	Cat. No.
0.1 mL concentrate	275R-34
0.5 mL concentrate	275R-35
1.0 mL concentrate	275R-36
1.0 mL predilute	275R-37
7.0 mL predilute	275R-38
25.0 mL prediute	275R-30

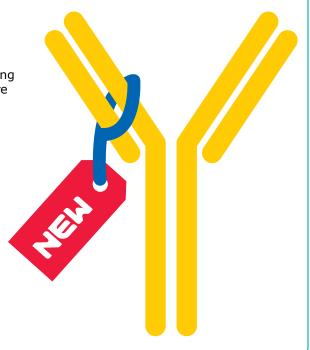


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Description	Cat. No.
ROS1 (MRQ-68)	
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0.5 mL	469R-95-ASR
1.0 mL	469R-96-ASR
1.0 mL Sample Size	469R-97-ASR
7.0 mL	469R-98-ASR

Description	Cat. No.
ARID1A (EP303)	
0.1 mL	407R-14-ASR
0.5 mL	407R-15-ASR
1.0 mL	407R-16-ASR
1.0 mL Sample Size	407R-17-ASR
7.0 mL	407R-18-ASR





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Intended Use: These products herein are intended for laboratory use in the detection of their respective proteins in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. These products are not a stand-alone diagnostic, and cannot be used for diagnosis, treatment, prevention, or mitigation of disease.

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