

# PRODUCT INFORMATION

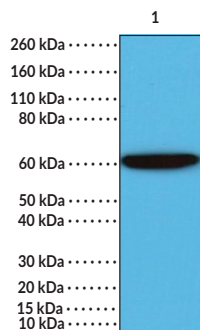
## Cytokeratin 5/Cytokeratin 6 (C-Term) Rabbit Monoclonal Antibody (Clone RM341)

Item No. 32307

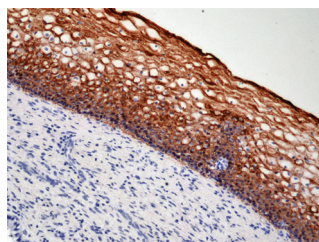
### Overview and Properties

<b>Contents:</b>	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
<b>Synonyms:</b>	CK5/CK6, Keratin, Type II Cytoskeletal 5/6, Keratin 5/Keratin 6, KRT5/KRT6
<b>Immunogen:</b>	Peptide from the C-terminal region of human cytokeratin 5
<b>Cross Reactivity:</b>	(+) Cytokeratin 5, and cytokeratin 6
<b>Species Reactivity:</b>	(+) Human
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM341
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:500-1:1,000 for IHC and 1:2,000-1:4,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

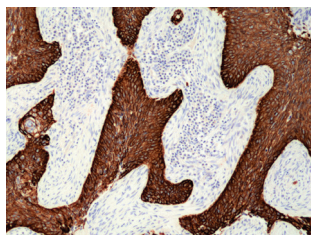
### Images



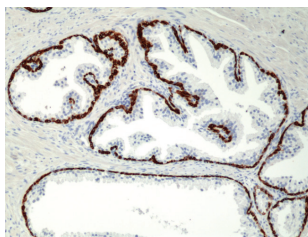
WB of A431 cell lysate using Cytokeratin 5/Cytokeratin 6 (C-term) Rabbit Monoclonal Antibody (Clone RM341) at a dilution of 1:2,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human cervix tissue using Cytokeratin 5/Cytokeratin 6 (C-Term) Rabbit Monoclonal Antibody (Clone RM341) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human lung squamous cell carcinoma tissue using Cytokeratin 5/Cytokeratin 6 (C-Term) Rabbit Monoclonal Antibody (Clone RM341) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human prostate tissue using Cytokeratin 5/Cytokeratin 6 (C-Term) Rabbit Monoclonal Antibody (Clone RM341) at a dilution of 1:1,000.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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## Description

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Cytokeratin 5 (CK5) and CK6 are type II intermediate filament proteins.<sup>1,2</sup> They are each composed of a central rod containing four  $\alpha$ -helical domains, which are important for self-assembly, and non-helical head and tail domains at the N- and C-termini, respectively. CK5 is expressed in basal keratinocytes in the epidermis and is an integral component of the epithelial cell cytoskeleton.<sup>3</sup> It dimerizes with the type I epithelial intermediate filament protein CK14 *via* heptad repeats in the central rod domain to form a network of filament bundles throughout the cytoplasm.<sup>1,2</sup> CK6 expression is restricted to ectoderm-derived epithelial appendages, such as hair follicles, nails, and teeth, but is induced at sites of wound injury and persists until barrier function is restored and the wound is closed.<sup>2</sup> CK5 and CK6 are associated with poor prognosis in patients with high-grade serous ovarian carcinoma or triple-negative breast cancers.<sup>5,6</sup> Cayman's Cytokeratin 5/Cytokeratin 6 (C-Term) Rabbit Monoclonal Antibody (Clone RM341) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

## References

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1. Gu, L.-H. and Coulombe, P.A. Keratin function in skin epithelia: A broadening palette with surprising shades. *Curr. Opin. Cell Biol.* **19(1)**, 13-23 (2007).
2. Wang, F., Chen, S., Liu, H.B., *et al.* Keratin 6 regulates collective keratinocyte migration by altering cell-cell and cell-matrix adhesion. *J. Cell Biol.* **217(12)**, 4314-4330 (2018).
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4. Chan, Y.M., Yu, Q.C., LeBlanc-Straceski, J., *et al.* Mutations in the non-helical linker segment L1-2 of keratin 5 in patients with Weber-Cockayne epidermolysis bullosa simplex. *J. Cell Sci.* **107(Pt 4)**, 765-774 (1994).
5. Taube, E.A., Denkert, C., Sehouli, J., *et al.* Cytokeratin 5/6 expression, prognosis and association with ER- $\alpha$  in high-grade serous ovarian carcinoma. *Hum. Pathol.* **67**, 30-36 (2017).
6. Inanc, M., Ozakan, M., Karaca, H., *et al.* Cytokeratin 5/6, c-Met expressions, and PTEN loss prognostic indicators in triple-negative breast cancer. *Med. Oncol.* **31(1)**, 801 (2013).

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