

# Cytokeratin 5,6 Cocktail; Clones EP42 & EP67 (Ready-To-Use)

<b>Availability/Contents:</b>	<u><b>Item #</b></u>	<u><b>Volume</b></u>
	A00141-0002	2 ml
	A00141-0007	7 ml
	A00141-0025	25 ml

**Description:**

**Species:** Rabbit

**Designation:** Rabbit Monoclonal Cocktail

**Clone:** EP42 & EP67

**Isotype:** IgG

**Immunogen:** Rabbits were injected with a synthetic peptide corresponding to residues near the C-terminus of human Cytokeratin 5 and human Cytokeratin 6 protein.

**Format:** This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.

**Specificity:** Cytokeratin 5,6 is expressed in many non-keratinizing stratified squamous epithelia including: basal epithelia, hair follicles, trachea, tongue mucosa, as well as basal cells in prostate glands and myoepithelial cells in mammary glands. Cytokeratin 5,6 protein is also found in most epithelial and bispasic mesotheliomas, large cell carcinoma and pulmonary squamous cell carcinomas.

**Background:** Cytokeratin 5 is a type II Cytokeratin consisting of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains and coexpressed during differentiation of simple and stratified epithelial tissues. The type II Cytokeratin genes are clustered in a region of chromosome 12q12-q13. Cytokeratin 5 is a 58kD protein that is closely related to Cytokeratin 6.

Cytokeratin 5 and calretinin have been useful markers suggestive of mesothelioma. Their expression is analyzed for the histological differential diagnosis with adenocarcinomas, especially when confronted with metastatic tumors of unknown origin.

The human type II Cytokeratin 6 (CK6) is expressed in a heterogeneous array of epithelial tissues under normal conditions, but is better known for its strong induction in stratified epithelia that feature an enhanced cell proliferation rate or abnormal differentiation.

In humans, multiple isoforms of Cytokeratin 6 encoded by several highly homologous genes have been identified which have distinct tissue expression patterns. Cytokeratin 6A is the dominant form in epithelial tissue. The gene encoding human Cytokeratin 6A maps to chromosome 12q13. Mutations to this gene are linked to several inheritable hair and skin disorders (psoriasis and actinic keratosis) and in cancer.

In combination, Cytokeratin 5 and Cytokeratin 6 is useful to differentiate mesothelioma (positive) from lung adenocarcinoma (negative) or metastatic carcinoma (negative). The cocktail is also useful in distinguishing between ductal hyperplasia of the breast (positive) and solid papillary DCIS (negative).

Storage: 2° C  8° C



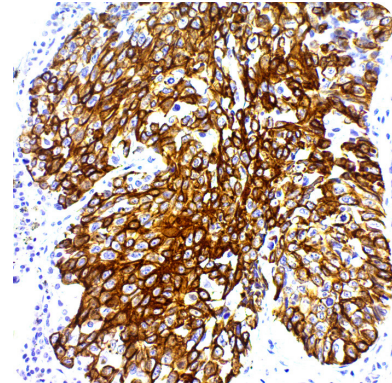
ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.



EC REP EmergoEurope (31)(0) 70 345-8570  
 Molsnstraat 15  
 2513 BH Hague, The Netherlands

Species Reactivity:	Human. Others not tested.
Positive Control:	Skin for normal tissue, Lung Squamous Cell Carcinoma or Mesothelioma for abnormal tissue.
Cellular Localization:	Cytoplasmic and cell surface.
Titer/Working Dilution:	No further dilution is required.
Microbiological State:	This product is not sterile.

**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Non-Sterile.



Human lung squamous cell carcinoma stained with Ultra-Tek HRP and DAB Chromogen.

Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)

**Procedure:**

- Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

**References:**

- Rabban JT, Koerner FC, Lerwill MF. Human Pathol. 2006; 37(7):787-793.
- Camilo R, Capelozzi VL, Siqueira SA, et al. Human Pathol. 2006; 37(7):542-546.
- King JE, Thatcher N, Pickering CA, et al. Histopathology 2006; 48(3):223-232.
- BMC Cancer 2007; 24(7):134.
- Franchi A, Moroni M, Massi D, et al. Am J Surg. Pathol 2002; 26(12):1597-1604.

Note: Cytokeratin 5,6 bearing EP Clones EP42 & EP67 is Manufactured using Epitomics’s RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409.

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# Instructions For Use

## A00141-IFU-RUO




Rev. Date: July 31, 2014

Revision: 1

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