

Instructions For Use A00139-IFU-RUO

Rev. Date: May 8, 2014

Revision: 1

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Cytokeratin 5; Clone EP42 (Ready-To-Use)

Availability/Contents: <u>Item #</u> <u>Volume</u>

A00139-0002 2 ml A00139-0007 7 ml A00139-0025 25 ml

Description:

Species: Rabbit

Designation: Rabbit Monoclonal

Clone: EP42 Isotype: IgG

Immunogen: Rabbits were injected with a synthetic peptide corresponding to residues near the C-Terminus

of human Cytokeratin 5.

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 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 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. A combination of Cytokeratin 5, Cytokeratin 14, and p63 has been used as a sensitive and specific basal cell marker of basal-like phenotype of breast carcinoma and to differentiate normal and prostate cancer. Loss-of-function mutations in the Cytokeratin 5 gene affected family members and in six unrelated patients with Dowling-Degos disease (DDD) caused an autosomal dominant genodermatosis. This sugguests a crucial role for cytokeratins in the organization of cell adhesion, melanosome uptake, organelle transport and nuclear anchorage.

Species Reactivity: Human. Others not tested.

Positive Control: Skin for normal tissue and Mesothelioma for abnormal tissue.

Cellular Localization: Cytoplasm and Cell Surface.

Titer/Working Dilution: No further dilution is required.

Microbiological State: This product is not sterile.

Storage: 2° C

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

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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

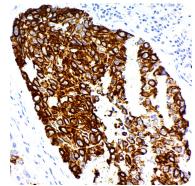
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



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

Procedure:

- Tissue Section Pretreatment (Highly Recommended): Staining of formalin fixed, paraffin embedded tissue 1. sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- 2. **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.
- 3. 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):787-93...
- Camilo R, Capelozzi VL, Sigueira SA et al. Human Pathol. 2006; 37(5):542-6.
- King JE, Thatcher N, Pickering CA et al. Histopathology 2006; 48(3):223-32.
- BMC Cancer 2007; 24:7:134.
- Franchi A, Moroni M, Massi D et al. Am J Surg.Pathol 2002; 26(12); 1597-604

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

Warranty: No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C

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