

# Cytokeratin 7; Clone OV-TL12/30 (Concentrate)

<b>Availability/Contents:</b>	<u><b>Item #</b></u>	<u><b>Volume</b></u>
	A00142-C.1	0.1 ml
	A00142-C	1 ml

**Description:**


**Species:** Mouse  
**Immunogen:** BALB/c mice were injected with OTN11-ovarian cell carcinoma cell line.  
**Clone:** OV-TL12/30  
**Isotype:** IgG1  
**Format:** This antibody is provided in a phosphate buffered saline containing 1% BSA.  
**Specificity:** Cytokeratin 7 expression is restricted to most glandular and transitional epithelia including lung, breast, bladder and female genital tract and their adenocarcinomas, but not in most gastrointestinal epithelium, prostate, hepatocyte and squamous epithelium.

**Background:** Cytokeratin (CK) 7 is a type II keratin which is a cytoplasmic intermediate filament protein (IFP) of low molecular weight 54kDa. CK7 belongs to the neutral basic type B subfamily of cytokeratins. The genes encoding the type II cytokeratins are clustered in a region of chromosome 12q12-q13. CK7 is expressed in a tissue-specific manner which is generally restricted to the simple epithelium usually found in most glandular and transitional epithelia including lung, breast, bladder and female genital tract and their neoplasms, but not in most gastrointestinal epithelium, prostate, hepatocyte and squamous epithelium. The predicted amino acid sequence of this keratin has revealed a striking difference between this keratin and the type II keratins expressed in epidermal cells.

CK 7 has been reported in of the lung, breast, endometrium, ovary, thyroid as well as in carcinomas of the bladder and chromophobe renal cell carcinoma. CK7 expression has been reported to show characteristic patterns on primary and metastatic lung and colorectal adenocarcinomas. Cytokeratin 7 is reported to be expressed in abundance in cultured bronchial and mesothelial cells but only at lower levels in cultured epidermal cells. CK7 can be used as a tool in order to distinguish ovarian and gastrointestinal carcinomas, or transitional cell carcinomas and prostate cancer. In hepatocytes atypical expression of CK7 is a marker for primary biliary cirrhosis.

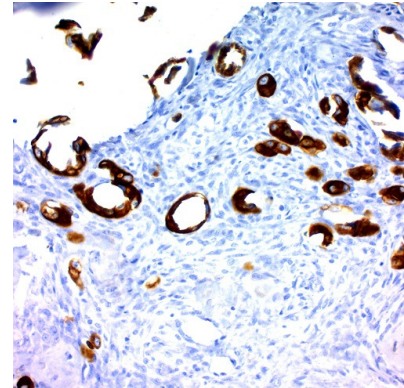
**Species Reactivity:** Human. Others not tested.  
**Positive Control:** Carcinoma of Ovary, Lung, Cervix or Breast.  
**Cellular Localization:** Cytoplasm and Cell Surface.  
**Titer/Working Dilution:** Immunohistochemistry: 1:100 – 1:150  
**Microbiological State:** This product is not sterile.

Storage: 2° C  8° C

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

  
  
 Emergo Europe  
 Prinsessegracht 20  
 2514 AP The Hague, The Netherlands

**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 Carcinoma stained with Ultra-Tek HRP and DAB Chromogen.

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

**Procedure:**


1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue 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:**


1. Ramaekers F, Huysmans A, Schaart G, et al. (1987). Tissue distribution of keratin 7 as monitored by a monoclonal antibody. *Exp. Cell Res.* 170 (1): 235–49.
2. Jovanovic I, Tzardi M, Mouzas IA, et al. (2002). Changing pattern of cytokeratin 7 and 20 expression from normal epithelium to intestinal metaplasia of the gastric mucosa and gastroesophageal junction". *Histol. Histopathol.* 17 (2): 445–54.
3. Ramaekers F, van Nierkerk C, Poels L et al., (1990). Use of monoclonal antibodies to keratin 7 in the differential diagnosis of adenocarcinomas. *Am J Pathol* 136:641-55.

**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.

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