

# Ep-CAM / CD326 (Epithelial Marker); Clone HEA125 (Concentrate)

**Availability/Contents:**


<u>Item #</u>	<u>Volume</u>
RA0198-C.5	0.5 ml

**Description:**

Species:	Mouse
Immunogen:	Human colon cancer HT29 cells
Clone:	HEA125
Isotype:	IgG1, kappa
Entrez Gene ID:	4072 (Human)
Hu Chromosome Loc.:	2p21
Synonyms:	Adenocarcinoma-associated Antigen; Cell Surface Glycoprotein Trop-1; EGP2; EGP314; EGP40; Epithelial Cell Adhesion Molecule; Epithelial Glycoprotein 314; ESA; KSA; TACD1; TROP1; Tumor-associated Calcium Signal Transducer 1 (TACSTD1); ECS-1; Epidermal Surface Antigen 1; ESA1; FLOT2; Flotillin-2; Membrane Component, Chromosome 17, Surface Marker-1 (M17S1); REG-1; Reggie-1; Reggie-2
Mol. Weight of Antigen:	40-43kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes a 40-43kDa transmembrane epithelial glycoprotein, identified as epithelial specific antigen (ESA), or epithelial cellular adhesion molecule (Ep-CAM). In immunoprecipitation experiments, the Ber-EP4 antibody blocks the reaction of the HEA125 antibody with MCF-7 cell lysate and vice versa, showing that the two antibodies react with the same antigen. The two antibodies also produce identical staining results in cells and tissues. Of the 37 cell lines tested, the antibody homogeneously labels all (10/10) carcinoma cell lines, whereas all non-epithelial cell lines (26/27) are negative except for the erythromyeloid cell line K562.
Background:	Ep-CAM is expressed on basolateral cell surfaces in most simple epithelia and in a vast majority of carcinomas. This antibody has been used to distinguish adenocarcinoma from pleural mesothelioma and hepatocellular carcinoma. It is also useful in distinguishing serous carcinomas of the ovary from mesothelioma. It has been reported that this epithelial antigen plays an important role as a tumor-cell marker in lymph nodes from patients with esophageal carcinoma, otherwise classified as node-negative. This epithelial antigen has also been suggested as a discriminator between basal cell and basosquamous carcinomas, and squamous cell carcinoma of the skin.
Species Reactivity:	Human. Others not known.
Positive Control:	HT29 cells or breast tumor.
Cellular Localization:	Cell surface
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 1-2 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate

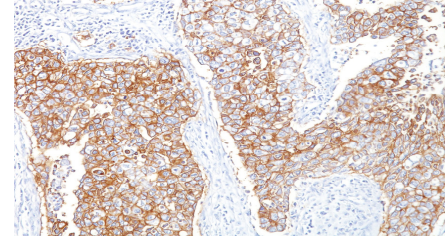
 Storage: 2° C  8° C


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



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

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.



Formalin-fixed, paraffin-embedded human breast cancer stained with Ep-CAM; Clone HEA125.

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

**Procedure:**

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissues requires digestion of tissue sections with Pepsin (Solution) (ScyTek catalog# PSS).
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. Latza U, Niedobitek G, Schwarting R, Nekarda H, Stein H. Ber-EP4: new monoclonal antibody which distinguishes epithelia from mesothelia. J Clin Pathol 1990;43:213-9.


**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  8° C

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