


# MUC1 / EMA / CD227 (Epithelial Marker); Clone HMPV (Concentrate)

**Availability/Contents:**

<u>Item #</u>	<u>Volume</u>
RA0218-C.5	0.5 ml


**Description:**

Species:	Mouse
Immunogen:	Human breast cancer cell line ZR-75 cells
Clone:	HMPV
Isotype:	IgM, kappa
Entrez Gene ID:	4582 (Human)
Hu Chromosome Loc.:	1q22
Synonyms:	Breast carcinoma-associated antigen DF3, CA15-3, Carcinoma-associated mucin Episialin, Epithelial Membrane Antigen, H23AG, KL-6, MAM6, MUC-1, MUC-1/SEC, MUC-1/X, MUC1-alpha, MUC1-beta, MUC1-CT, MUC1-NT, MUC1/ZD, Mucin 1 cell surface associated, Mucin-1 subunit beta, Peanut-reactive urinary mucin, PEM, PEMT, Polymorphic epithelial mucin, PUM, Tumor-associated epithelial membrane antigen, Tumor-associated mucin
Mol. Weight of Antigen:	265-400kDa
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:	HMPV recognizes full-length MUC1 in a glycosylation-independent manner and can bind to the fully glycosylated protein. The dominant epitope of HMPV is APDTR in the VNTR region. It reacts with the core peptide of the MUC1 protein. This antibody has been shown to react with both normal and malignant epithelia of various tissues including breast and colon.
Background:	MUC1 is a member of a family of mucin glycoproteins that are characterized by high carbohydrate content, O-linked oligosaccharides, high molecular weight (>200kDa), and an amino acid composition rich in serine, threonine, proline, and glycine. The core protein contains a domain of 20 amino acid tandem repeats, which functions as multiple epitopes for the monoclonal antibody. Incomplete glycosylation of some tumor-associated mucins may lead to variable unmasking of the multiple peptide epitopes leading to the observed differences in staining intensity between normal and malignant tissues.
Species Reactivity:	Human. Others not known.
Positive Control:	MCF-7 or MDA-231 cells. Breast or colon carcinoma.
Cellular Localization:	Cytoplasmic and 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
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.



 EmergoEurope (31)(0) 70 345-8570  
Molsnstraat 15  
2513 BH 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.

**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 tissue sections is significantly 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. Xing PX, Prenzoska J, McKenzie IF. Epitope mapping of anti-breast and anti-ovarian mucin monoclonal antibodies. Mol Immunol. 1992 May;29(5):641-50.
2. Uwe Karsten, Catherine Diotel, Gunther Klich, Hans Paulsen, Steffen Goletz, Stefan Muller, and Franz-Georg Hanisch. Enhanced Binding of Antibodies to the DTR Motif of MUC1 Tandem Repeat Peptide Is Mediated by Site-specific Glycosylation1. Cancer Research 58, 2541-2549, June 15, 1998
3. Devine PL, Birrell GW, Whitehead RH, Harada H, Xing PX, McKenzie IF. Expression of MUC1 and MUC2 mucins by human tumor cell lines. Tumour Biol. 1992; 13(5):268-277.

**Warranty:**


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Storage: 2° C  8° C



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