

Instructions For Use

RA0216-C.5-IFU-RUO

Rev. Date: Nov. 11, 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

MUC1 / EMA / CD227 (Epithelial Marker); Clone PEM/845

(Concentrate)

Volume 0.5 ml

Availability/Contents: Item #_RA0216-C.5

Description:

Species: Mouse

Immunogen: Recombinant human MUC1 protein

Clone: PEM/845
Isotype: IgG1, kappa
Entrez Gene ID: 4582 (Human)

Hu Chromosome Loc.: 1g22

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: In Western blotting, this antibody recognizes proteins in a MW range of 265-400kDa, identified

as different glycoforms of MUC1. This antibody reacts with the DTRP epitope within the tandem repeats. In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinoma tissues. An antibody to MUC1 is useful as a pan-epithelial marker for detecting early metastatic

loci of carcinoma in bone marrow or liver.

Background: MUC1 is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex

consisting of the N-terminal alpha subunit and the C-terminal beta subunit. The alpha subunit of MUC1 has cell adhesive properties. It can act both as an adhesion and an anti-adhesion protein. MUC1 may provide a protective layer on epithelial cells against bacterial and enzymatic attack. The beta subunit contains a C-terminal domain, which is involved in cell signaling

through phosphorylation and protein-protein interactions.

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

 $\begin{tabular}{ll} Immunofluorescence: & 1-2 \ \mu g/ml \\ Western Blotting: & 0.5-1 \ \mu g/ml \\ \end{tabular}$

Immunoprecipitation: 1-2 μg/500μg protein lysate

Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West

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Doc: IFU-Template2-8rev2



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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

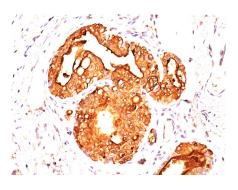
tissue sections, to be viewed by light

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



Formalin-fixed, paraffin-embedded human breast cancer stained with MUC1; Clone PEM/845. Note cytoplasmic and membrane staining

Procedure:

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

 Rughetti, A., et al. 2005. Recombinant tumor-associated Mucin 1 glycoprotein impairs the differentiation and function of dendritic cells. J. Immunol. 174: 7764-7772.

Warranty:

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Storage: 2° C - 8° C

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