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 GP1.4
(Concentrate)

Availability/Contents:

Item #	Volume
RA0212-C.5	0.5 ml

Description:

Species:	Mouse
Immunogen:	Human milk fat globule membranes
Clone:	GP1.4
Isotype:	IgG1, 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:	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 Immunofluorescence: 1-2 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc.
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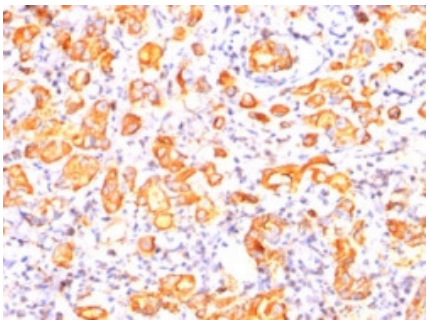
Uses/Limitations:

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.



Formalin-fixed, paraffin-embedded human breast cancer stained with MUC1; Clone GP1.4. Note cytoplasmic and membrane staining.

Ordering Information and Current Pricing at www.scytek.com

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).

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. Stanley CM, Phillips TE. Am J Physiol. 1999 Jul;277(1 Pt 1):G191-200.

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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