## Mucin 1 / EMA / Episialin / CD227 Monoclonal **Mouse Antibody (GP1.4)**



## **Product Description**

In Western blotting, this antibody recognizes proteins in MW range of 265-400 kDa, identified as different glycoforms of EMA. This MAb reacts with the DTRP epitope in the tandem repeats. Thealpha subunit has cell adhesive properties. It can act both as an adhesion and an anti-adhesion protein. EMA may provide a protective layer on epithelial cells against bacterial and enzyme attack. The beta subunit contains a C-terminal domain, which is involved in cell signaling, through phosphorylations and protein-protein interactions. In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinoma tissues. Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. Catalog number key for antibody number 0159, Anti-CD227 (GP1.4)

## Product attributes

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Antibody number	#0159		
Antibody reactivity	CD227, EMA, Episialin, Mucin 1		
(target) Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	GP1.4		
Isotype	lgG1, kappa		
Molecular weight	265-400 kDa		
Synonyms	Breast carcinoma-associated antigen DF3; CA15-3; Carcinoma-associated mucin Episialin; Epithelial Membrane Antigen; H23AG; KL-6; MAM6; MUC-1; MUC-1/X: MUC1-1alpha;		

Email: btinfo@biotium.com

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

4582 Entrez gene ID SwissProt P15941 Unigene Immunogen Human milk fat globule membranes Antibody target cellular Plasma membrane

MUC1

Verified antibody applications Species reactivity

IHC (FFPE) (verified), WB (verified)

Antibody application

Human gene symbol

Higher concentration may be required for

Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.1-0.2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user

Positive control

MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.

Shipping condition Storage Conditions

Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C

Shelf life

Guaranteed for at least 24 months from

date of receipt when stored as recommended

Regulatory status

For research use only (RUO)

Antibody/conjugate formulation

Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide

Cancer, Mucins

Antibody research areas Epithelial cells, Mammary gland Cell/tissue expression

Tumor expression Breast cancer

Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
CF®488A	490/515	488	GFP, FITC	CF®488A Features
CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
CF®594	593/614	561	Texas Red®	CF®594 Features
CF®640R	642/662	633-640	Cy®5	CF®640R Features
CF®647	650/665	633-640	Cy®5	CF®647 Features
Biotin	N/A	N/A	N/A	
Purified	N/A	N/A	N/A	
Purified,	N/A	N/A	N/A	
	CF®405S  CF®488A  CF®568  CF®594  CF®640R  CF®647  Biotin  Purified	CF®405S 404/431  CF®488A 490/515 CF®568 562/583 CF®594 593/614 CF®640R 642/662 CF®647 650/665 Biotin N/A Purified N/A	CF®405S       404/431       405         CF®488A       490/515       488         CF®568       562/583       532, 561         CF®594       593/614       561         CF®640R       642/662       633-640         CF®647       650/665       633-640         Biotin       N/A       N/A         Purified       N/A       N/A	CF®405S         404/431         405         DAPI (microscopy), AF405           CF®488A         490/515         488         GFP, FITC           CF®568         562/583         532, 561         RFP, TRITC           CF®594         593/614         561         Texas Red®           CF®640R         642/662         633-640         Cy®5           CF®647         650/665         633-640         Cy®5           Biotin         N/A         N/A         N/A           Purified         N/A         N/A         N/A

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