

Mucin 1 / EMA / Episialin / CD227 Monoclonal Mouse Antibody (GP1.4 + E29)



Product Description

In Western blotting, it recognizes proteins in MW range of 265-400 kDa, identified as different glycoforms of EMA. The a 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 ß 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 0743, Anti-CD227 (GP1.4 E29)

Cell/tissue expression

Tumor expression

Call us : <u>800-304-5</u>	357 Email: techsupport@biotium.com				
Product attributes					
Antibody number	#0743				
Antibody reactivity (target)	CD227, EMA, Episialin, Mucin 1				
Antibody type	Primary				
Host species	Mouse				
Clonality	Monoclonal				
Clone	GP1.4 + E29				
Isotype	lgG's				
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/SEC; MUC-1/X; MUC1-alpha; MUC1-beta; MUC1-CT, MUC1-1/SEC; 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				
Human gene symbol	MUC1				
Entrez gene ID	4582				
SwissProt	P15941				
Unigene	89603				
Immunogen	Human milk fat globule membranes (GP1.4); Delipidated extract of human milk fat globule membranes (E29)				
Antibody target cellular localization	Plasma membrane				
Verified antibody applications	IHC (FFPE) (verified)				
Species reactivity	Human				
Antibody application notes	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	Room temperature				
Storage Conditions	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				
Antibody research areas	Cancer, Mucins				
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.				

Epithelial cells, Mammary gland

Breast cance

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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