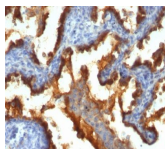


Mucin 1 / EMA / Episialin / CD227 Monoclonal Mouse Antibody (139H2)



Product Description

This MAb reacts with MUC1. The dominant epitope of this MAb has not yet been determined. MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over expressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four c-erbB receptors and localize with c-erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells. 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 0925, Anti-CD227 (139H2)

Product attributes

Antibody number	#0925
Antibody reactivity (target)	CD227, EMA, Episialin, Mucin 1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	139H2
Isotype	IgG1, 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/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
Human gene symbol	MUC1
Entrez gene ID	4582
SwissProt	P15941
Unigene	89603
Immunogen	Human milk-fat globule membranes (HMFGM)
Antibody target cellular localization	Plasma membrane
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Species reactivity	Human, Mouse
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL. Immunohistology formalin-fixed 0.5-1 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, ELISA For coating use Ab at 2-5 ug/mL, order Ab without BSA, Flow Cytometry 0.25-0.5 ug/million cells in 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.
Cell/tissue expression	Epithelial cells, Mammary gland
Tumor expression	Breast cancer

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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