Mucin 1 / EMA / Episialin / CD227 Monoclonal Mouse Antibody (HMPV)



Product Description

This MAb recognizes full-length MUC1 in a glycosylation-independent manner and can bind to the fully glycosylated protein. The dominant epitope of this MAb is APDTR in the extracellular VNTR region. It reacts with the core peptide of the MUC1 protein, which is a member of a family of mucin glycoproteins that are characterized by high carbohydrate content, O-linked oligosaccharides, high molecular weight (>200 kDa) and an amino acid composition rich in serine, threonine, proline and glycine. The core protein contains a domain of 20 amino-acid tandem repeats that functions as multiple epitopes for the MAb. Incomplete glycosylation of some tumor-associated mucins may lead to variable unmasking of the multiple peptide epitopes leading to the observed differences in staining intensity between normal and malignant tissues. This MAb reacts with both normal and malignant epithelia of various tissues including breast and colon.

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 0954, Anti-CD227|EMA|Episialin|Mucin 1 (HMPV)

Product attributes

Product attributes				
Antibody number	#0954			
Antibody reactivity (target)	CD227, EMA, Episialin, Mucin 1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	HMPV			
Isotype	IgG1, kappa			
Molecular weight	265-400 kDa			
Synonyms	Breast carcinoma-associated antigen DF3; CA15-3; Carcinoma-associated mucin Epislalin; 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 breast cancer cell line ZR-75 cells			
Verified antibody applications	Flow (surface) (verified), IF (verified), IHC (FFPE) (verified), WE (verified)			
Antibody target cellular localization	Plasma membrane			
Species reactivity	Human			
Antibody application notes	Immunohistology formalin-paraffin 0.25-0.5 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, Immunofluorescence 1-2 ug/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	Sion Epithelial cells, Mammary gland			
Tumor expression	expression Breast cancer			

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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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