## Mucin 1 / EMA / Episialin / CD227 Recombinant Monoclonal Rabbit Antibody (MUC1/2278R)



## **Product Description**

This MAb reacts with MUC1, a large transmembrane glycoprotein expressed on the ductal surface of normal glandular epithelia. It is used as tracer agent in CA15.3 assays. The extracellular domain of MUC1 largely consists of a highly conserved, O-glycosylated 20 amino acids tandem repeat which can occur 30-100 times per molecule depending on the length of the allele involved. In the vast majority of human carcinomas this protein is up-regulated and poorly glycosylated and appears on the cell surface in a non-polarized fashion. The dominant epitope of this MAb involves both amino acids as well as sugar moieties. Its epitope is destroyed by desialylation i.e. treatment with Neuraminidase.

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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2278, Anti-MUC1 / CA15-3 / EMA / CD227 (MUC1/2278R)

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Product attributes			
Antibody number	#2278		
Antibody reactivity (target)	CA15-3, CD227, EMA, MUC1		
Antibody type	Primary		
Host species	Rabbit		
Clonality	Recombinant Monoclonal		
Clone	MUC1/2278R		
Isotype	IgG		
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-IV, 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	Recombinant full-length human MUC1 protein		
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, Immunohistology (formalin): 0.5-1 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, 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		
Cell/tissue expression	Epithelial cells, Mammary gland		
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.		

Call us: 800-304-5357 Email: btinfo@biotium.com

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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