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## Mucin 1 / EMA / Episialin / CD227 Monoclonal Mouse Antibody (VU-2G7)



## **Product Description**

MAb VU-2G7 reacts with MUC1, a large transmembrane glycoprotein expressed on the ductal surface of normal glandular epithelia. The dominant epitope of VU-2G7 has not been established with epitope fingerprinting. 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.

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 0630, Anti-CD227 (VU-2G7)

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

## Product attributes

Antibody number	#0630			
Antibody reactivity (target)	CD227, EMA, Episialin, Mucin 1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	VU-2G7			
Isotype	IgG1, kappa			
Molecular weight	265-400 kDa			
Synonyms	Breast carcinoma-associated antigen DF3; CA15-3; Carcinoma-associated mucin Epistalii; 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	Synthetic glycosylated MUC1 60mer tandem repeat NH2-(HGVTSAPDT(GalNAc)RPAPGSTAPPAHG)3- COOH, conjugated to bovine serum albumin			
Antibody target cellular localization	Plasma membrane			
Expected antibody applications	ELISA (published for clone), Flow, surface (published for clone), IHC (FFPE) (published for clone)			
Species reactivity	Human			
Antibody application notes	Immunohistology formalin-paraffin 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 m ditrate 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			
	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific			
Positive control	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific			
Positive control Shipping condition	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial			
	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.			
Shipping condition	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light,			
Shipping condition Storage Conditions	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when			
Shipping condition Storage Conditions Shelf life	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended			
Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.05% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA/0.05% aride, Purified; 0.2 mg/mL in PBS/0.05% BSA/0.05% BSA/0.05% azide, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified; 0.2 mg/mL in PBS/0.05% azide, Purified;			
Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purfiled, BSA-free: 1 mg/mL in PBS without azide			
Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation Antibody research areas	Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user  MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  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  Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in			

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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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- 1. ACS Omega (2017) 2 (11), 7493-7505. (ELISA, Flow) 2. Arch Dermatol Res (2003) 295:146-154. (immunohistochemistry)

This datasheet was generated on November 5, 2025 at 06:32:44 AM. Visit product page to check for updated information before use. Product link:  $\frac{\text{https://biotium.com/product/monoclonal-anti-mucin-1-ema-episialin-cd227-vu-2g7/}{\text{https://biotium.com/product/monoclonal-anti-mucin-1-ema-episialin-cd227-vu-2g7/}}$