Datasheet: MCA1742F

Description:	MOUSE ANTI HUMAN CD227:FITC
Specificity:	CD227
Other names:	CA 15-3, MUCIN 1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	C595 (NCRC48)
Isotype:	IgG3
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein

IgG concentration 0.1 mg/ml

Concentrations	
Immunogen	Urinary MUC-1 mucin.
External Database Links	**UniProt:** P15941 Related reagents **Entrez Gene:** 4582 MUC1 Related reagents
Synonyms	PUM
RRID	AB_324409
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of a mouse myeloma cell line.
Specificity	**Mouse anti Human CD227 antibody, clone C595 (NCRC48)** recognizes CD227, also known as mucin 1 which is a breast cancer associated mucin encoded by the Muc-1 gene. Mucins are a family of high molecular weight, heavily glycosylated proteins (glycoconjugates) produced by many epithelial tissues in vertebrates. CD227 is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. This protein is overexpressed abundantly in >90% breast carcinomas and metastases. Mouse anti Human CD227 antibody, clone C595 recognizes the peptide epitope ARG-PRO-ALA-PRO within the protein core of the mucin.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Price, M.R. *et al.* (1990) Immunological and structural features of the protein core of human polymorphic epithelial mucin. Mol Immunol. 27 (8): 795-802. 2. Price, M.R. *et al.* (1991) Purification of anti-epithelial mucin monoclonal antibodies by epitope affinity chromatography. J Immunol Methods. 139 (1): 83-90. 3. Denton, G. *et al.* (1995) Primary sequence determination and molecular modelling of the variable region of an antiMUC1 mucin monoclonal antibody. Eur J Cancer. 31A (2): 214-21. 4. Denton, G. *et al.* (1997) Production and characterization of a recombinant anti-MUC1 scFv reactive with human carcinomas. Br J Cancer. 76 (5): 614-21. 5. Murray, A. *et al* (2001) Production and characterization of 188Re-C595 antibody for radioimmunotherapy of transitional cell bladder cancer. J Nucl Med. 42: 726-32. 6. Huang, D.M. *et al.* (2004) Modulation of anti-adhesion molecule MUC-1 is associated with arctiin-induced growth inhibition in PC-3 cells. Prostate. 2004 May 15;59(3): 260-7. 7. Ragupathi, G. *et al.* (2005) Antibodies against tumor cell glycolipids and proteins, but not mucins, mediate complement-dependent cytotoxicity. J Immunol. 174: 5706-12. 8. Hisatsune, A. *et al.* (2011) Anti-MUC1 antibody inhibits EGF receptor signaling in cancer cells. Biochem Biophys Res Commun. 405: 377-81.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1742F 10041
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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