Datasheet: 6378-0135

Description:	MOUSE ANTI HUMAN CD227
Specificity:	CD227
Other names:	CA 15-3, MUCIN 1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	VU-3C6
Isotype:	IgG1
Quantity:	0.2 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	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/200 - 1/1000

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 the appropriate negative/positive controls.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species	Human
Product Form	Purified IgG - liquid
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)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human breast cancer cell line ZR-75-1.
External Database Links	**UniProt:** P15941 Related reagents **Entrez Gene:** 4582 MUC1 Related reagents
Synonyms	PUM
RRID	AB_620067
Specificity	**Mouse anti Human CD227 antibody, clone VU-3C6** 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. The dominant epitope recognized by this antibody is the 12-mer GVTSAPDTRPAP of the mucin 1 tandem repeat. Mouse anti Human CD227 antibody has been tested on frozen human ovarian carcinoma tissue sections and paraffin embedded sections from normal breast tissue. Mouse anti Human CD227 antibody, clone VU-3C6 also reacts weakly with sections of small intestine and colon.
References	1. Treon, S.P. *et al.* (1999) Muc-1 core protein is expressed on multiple myeloma cells and is induced by dexamethasone. Blood. 93: 1287-98. 2. Treon, S.P. *et al.* (2000) Elevated soluble MUC1 levels and decreased anti-MUC1 antibody levels in patients with multiple myeloma. Blood. 96: 3147-53. 3. Vlad, A.M. *et al.* (2002) Complex carbohydrates are not removed during processing of glycoproteins by dendritic cells: processing of tumor antigen MUC1 glycopeptides for presentation to major histocompatibility complex class II-restricted T cells. J Exp Med. 196: 1435-46. 4. Karsten, U. *et al.* (2004) Binding patterns of DTR-specific antibodies reveal a glycosylation-conditioned tumor-specific epitope of the epithelial mucin (MUC1). Glycobiology. 14: 681-92. 5. Danielczyk, A. *et al.* (2006) PankoMab: a potent new generation anti-tumour MUC1 antibody. Cancer Immunol Immunother. 55 (11): 1337-47.

6. Kinlough, C.L. *et al.* (2006) Recycling of MUC1 is dependent on its palmitoylation. J Biol Chem. 281: 12112-22.
7. Meng, C.X. *et al.* (2010) Effects of oral and vaginal administration of levonorgestrel emergency contraception on markers of endometrial receptivity. Hum Reprod. 25 (4): 874-83.
8. Engelstaedter, V. *et al.* (2012) Mucin-1 and its relation to grade, stage and survival in ovarian carcinoma patients. BMC Cancer. 12: 600.

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/6378-0135 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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