

## Datasheet: 6378-0135

<b>Description:</b>	MOUSE ANTI HUMAN CD227
<b>Specificity:</b>	CD227
<b>Other names:</b>	CA 15-3, MUCIN 1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	VU-3C6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

<b>Immunogen</b>	Human breast cancer cell line ZR-75-1.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P15941</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4582</a>   MUC1   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	PUM
<b>Specificity</b>	<p><b>Mouse anti Human CD227 antibody, clone VU-3C6</b> recognises 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 &gt;90% breast carcinomas and metastases.</p> <p>The dominant epitope recognised by this antibody is the 12-mer GVTSAPDTRPAP of the mucin 1 tandem repeat.</p> <p>Mouse anti Human CD227 antibody has been tested on frozen human ovarian carcinoma tissue sections and paraffin embedded sections from normal breast tissue. This antibody also reacts weakly with sections of small intestine and colon.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Meng, C.X. <i>et al.</i> (2010) Effects of oral and vaginal administration of levonorgestrel emergency contraception on markers of endometrial receptivity. <a href="#">Hum Reprod. 25 (4): 874-83.</a></li> <li>2. Treon, S.P. <i>et al.</i> (1999) Muc-1 core protein is expressed on multiple myeloma cells and is induced by dexamethasone. <a href="#">Blood. 93: 1287-98.</a></li> <li>3. Treon, S.P. <i>et al.</i> (2000) Elevated soluble MUC1 levels and decreased anti-MUC1 antibody levels in patients with multiple myeloma. <a href="#">Blood. 96: 3147-53.</a></li> <li>4. Karsten, U. <i>et al.</i> (2004) Binding patterns of DTR-specific antibodies reveal a glycosylation-conditioned tumor-specific epitope of the epithelial mucin (MUC1). <a href="#">Glycobiology. 14: 681-92.</a></li> <li>5. Kinlough, C.L. <i>et al.</i> (2006) Recycling of MUC1 is dependent on its palmitoylation. <a href="#">J Biol Chem. 281: 12112-22.</a></li> <li>6. Vlad, A.M. <i>et al.</i> (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. <a href="#">J Exp Med. 196: 1435-46.</a></li> <li>7. Danielczyk, A. <i>et al.</i> (2006) PankoMab: a potent new generation anti-tumour MUC1 antibody. <a href="#">Cancer Immunol Immunother. 55 (11): 1337-47.</a></li> <li>8. Engelstaedter, V. <i>et al.</i> (2012) Mucin-1 and its relation to grade, stage and survival in ovarian carcinoma patients. <a href="#">BMC Cancer. 12: 600.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody.</p> <p>Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Shelf Life</b>	18 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@549</a> , <a href="#">DyLight@649</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Human Anti Mouse IgG1 (HCA036...)	<a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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