

## Datasheet: 1695-0028

<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-4H5
<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	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<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>	60-mer tandem repeat of VTSAPDTRPAPGSTAPPAHG, conjugated to BSA.
<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>RRID</b>	AB_620047
<b>Specificity</b>	<p><b>Mouse anti Human CD227 antibody, clone VU-4H5</b> recognizes human Mucin 1, also known as CD227, Cancer antigen 15-3, Episialin or Krebs von den Lungen-6. CD227 is a 1255 amino acid single pass type I transmembrane glycoprotein. Mucins are a family of high molecular weight, heavily glycosylated proteins (glycoconjugates) produced by many epithelial tissues in vertebrates. CD227 is a breast cancer associated mucin encoded by the Muc-1 gene. 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>Mouse anti Human CD227 antibody, clone VU-4H5 reacts with the APDTR peptide sequence (VTSAPDTRPAPGSTAPPAHG) of human CD227.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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>2. 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>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. Singh, R. <i>et al.</i> (2007) Target-specific cytotoxic activity of recombinant immunotoxin scFv(MUC1)-ETA on breast carcinoma cells and primary breast tumors. <a href="#">Mol Cancer Ther. 6: 562-9.</a></li> <li>5. 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>6. ten Berge, R.L. <i>et al.</i> (2001) MUC1 (EMA) is preferentially expressed by ALK positive anaplastic large cell lymphoma, in the normally glycosylated or only partly hypoglycosylated form. <a href="#">J Clin Pathol. 54: 933-9.</a></li> </ol>

**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.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/1695-0028">https://www.bio-rad-antibodies.com/SDS/1695-0028</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
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