

## Datasheet: MCA1743

**BATCH NUMBER 153589**

<b>Description:</b>	MOUSE ANTI HUMAN MUCIN 2
<b>Specificity:</b>	MUCIN 2
<b>Other names:</b>	MUC-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	996/1
<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 (1)	▪			
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 appropriate negative/positive controls.

**(1)Membrane permeabilization is required for this application. Bio-Rad recommend the use of Leucoperm™ (Product Code [BUF09](#)) 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 from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	MUC-2 tandem repeat peptide.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">Q02817</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">4583</a>    MUC2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	SMUC
<b>RRID</b>	AB_2148835
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of a mouse NS0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Mucin 2 antibody, clone 996/1</b> recognizes human Mucin 2 (MUC-2), and shows no cross-reactivity with MUC-1, MUC-3 or MUC-4.</p> <p>In formalin fixed, paraffin embedded tissue sections Mouse anti Human Mucin 2 antibody, clone 996/1 reveals high levels of expression in colon, liver and prostate tissues (<a href="#">Durrant et al. 1994</a>).</p> <p>Mouse anti Human Mucin 2 antibody, clone 996/1 recognizes malignant colonic mucosa as well as normal mucosa. Epitope mapping indicates that Mouse anti Human Mucin 2 antibody, clone 996/1 recognizes a sequence PTGTQ within the mucin 2 tandem repeat region (<a href="#">Uray et al. 1999</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>Histology Positive Control Tissue</b>	Normal colon
<b>References</b>	<ol style="list-style-type: none"> <li>1. Filipe, M.I. <i>et al.</i> (1996) Expression of a peptide epitope of the colonic mucin MUC2 in precursor lesions to gastric carcinoma. <a href="#">Eur J Cancer Prev. 5 (4): 287-95.</a></li> <li>2. Paulsen, F.P. <i>et al.</i> (2003) Characterization of mucins in human lacrimal sac and nasolacrimal duct. <a href="#">Invest Ophthalmol Vis Sci. 44 (5): 1807-13.</a></li> <li>3. Price, M.R. <i>et al.</i> (1999) Separation of distinct MUC2 mucin glycoforms using two anti-peptide monoclonal antibodies. <a href="#">Int J Oncol. 15 (4): 803-9.</a></li> <li>4. Price, M.R. <i>et al.</i> (1993) Immune recognition of human colonic-tumour-associated MUC-2 mucins using an anti-peptide antibody. <a href="#">Int J Cancer. 55 (5): 753-9.</a></li> </ol>

5. Tugyi, R. *et al.* (2005) Partial D-amino acid substitution: Improved enzymatic stability and preserved Ab recognition of a MUC2 epitope peptide. [Proc Natl Acad Sci U S A. 102 \(2\): 413-8.](#)
6. Uray, K. *et al.* (2000) Effect of D-amino acid substitution in a mucin 2 epitope on mucin-specific monoclonal antibody recognition. [Arch Biochem Biophys. 378 \(1\): 25-32.](#)
7. Uray, K. *et al.* (1999) Effect of solution conformation on antibody recognition of a protein core epitope from gastrointestinal mucin (MUC2). [Arch Biochem Biophys. 361 \(1\): 65-74.](#)

#### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

#### 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/MCA1743>  
10040

#### Regulatory

For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</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 (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<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	<b>Worldwide</b>	Tel: +44 (0)1865 852 700	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21
	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>		Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>		Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>

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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