

Datasheet: MCA1743

Description:	MOUSE ANTI HUMAN MUCIN 2
Specificity:	MUCIN 2
Other names:	MUC-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	996/1
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 (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. The use of Leucoperm (Product Code [BUF09](#)) 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	0.09% sodium azide (NaN ₃)

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen MUC-2 tandem repeat peptide.

External Database Links

UniProt:

[Q02817](#) [Related reagents](#)

Entrez Gene:

[4583](#) MUC2 [Related reagents](#)

Synonyms SMUC

RRID AB_2148835

Fusion Partners Spleen cells from immunized Balb/c mice were fused with cells of a mouse NS0 myeloma cell line.

Specificity **Mouse anti Human Mucin 2 antibody, clone 996/1** recognizes human Mucin 2 (MUC-2), and shows no cross-reactivity with MUC-1, MUC-3 or MUC-4.

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 ([Durrant et al. 1994](#)).

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 ([Uray et al. 1999](#)).

Flow Cytometry Use 10µl of the suggested working dilution to label 1x10⁶ cells in 100µl

Histology Positive Control Tissue Normal human colon

References

1. Price, M.R. *et al.* (1993) Immune recognition of human colonic-tumour-associated MUC-2 mucins using an anti-peptide antibody. [Int J Cancer. 55 \(5\): 753-9.](#)
2. Filipe, M.I. *et al.* (1996) Expression of a peptide epitope of the colonic mucin MUC2 in precursor lesions to gastric carcinoma. [Eur J Cancer Prev. 5 \(4\): 287-95.](#)
3. Paulsen, F.P. *et al.* (2003) Characterization of mucins in human lacrimal sac and nasolacrimal duct. [Invest Ophthalmol Vis Sci. 44 \(5\): 1807-13.](#)
4. Price, M.R. *et al.* (1999) Separation of distinct MUC2 mucin glycoforms using two anti-peptide monoclonal antibodies. [Int J Oncol. 15 \(4\): 803-9.](#)
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 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/MCA1743>
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 \(MCA928\)](#)

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
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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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