Datasheet: MCA1743A647

BATCH NUMBER 1807

Description:	MOUSE ANTI HUMAN MUCIN 2:Alexa Fluor® 647
Specificity:	MUCIN 2
Other names:	MUC-2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	996/1
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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)	▪			Neat - 1/10

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody 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.**

Target Species

Human

Product Form

Purified IgG conjugated to Alexa Fluor 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	MUC-2 tandem repeat peptide.
External Database Links	**UniProt:** Q02817 Related reagents **Entrez Gene:** 4583 MUC2 Related reagents
Synonyms	SMUC
Fusion Partners	Spleen cells from immunised 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 10ul of the suggested working dilution to label 1x10^6 cells in 100ul
References	1. 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. 2. Paulsen, F.P. *et al.* (2003) Characterization of mucins in human lacrimal sac and nasolacrimal duct. Invest Ophthalmol Vis Sci. 44 (5): 1807-13. 3. 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. 4. 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. 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.

	Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. 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
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1743A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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