Datasheet: MCA2260F

Description:	RAT ANTI RITUXIMAB:FITC
Specificity:	RITUXIMAB
Other names:	MabThera , Rituxan
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MB2A4
Isotype:	IgG2a
Quantity:	0.1 mg

Product Details

RRID AB_324411

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	▪			Neat

Where this antibody 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 antibody for use

Product Form Purified IgG - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

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
1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

Immunogen $F(ab)_2$ fragment of Rituximab

Fusion Partners Spleen cells from immunised rats were fused with cells of the NS-1 mouse myeloma cell line

Specificity **Rat Anti-Rituximab Antibody, clone MB2A4,** is an anti-idiotypic antibody that specifically recognizes the monoclonal antibody drug rituximab. The antibody can be used to measure the levels of rituximab and biosimilar products in bioanalytical assays. Rat Anti-Rituximab Antibody,

clone MB2A4, is specific for rituximab and does not recognize other CD20 antibodies. Clone MB2A4 has been used in ELISA to monitor the levels of rituximab in patient serum following therapy (Cragg et al. 2004 and Hampson et al. 2010).

Clone MB2A4 has been used to detect rituximab bound to the surface of the Raji B cell line, however detection of rituximab bound in vivo to B-CLL cells has not been demonstrated. It is possible that complement deposition on rituximab opsonised cells inhibits binding of the Anti-Rituximab Antibody to cell bound rituximab (Beum et al. 2004). Inhibition experiments carried out with Daudi cells demonstrated that this antibody is inhibitory at a ratio of 5:1 antibody:rituximab, but does not inhibit rituximab binding to CD20 at a ratio of 1:1.

Rituximab (reference product branded as Rituxan) is a chimeric mouse/human monoclonal antibody approved for the treatment of certain autoimmune diseases and cancer, including non-Hodgkin's lymphoma, chronic lymphocytic leukemia and rheumatoid arthritis. The antibody is specific for the cell surface protein CD20, which is widely expressed on B cells. Through three different mechanisms of action it eliminates B cells from the body, enabling the development of a new population of healthy B cells.

View a summary of all Anti-Rituximab Antibodies.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

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19. Lioger, B. *et al.* (2017) Antigenic burden and serum IgG concentrations influence rituximab pharmacokinetics in rheumatoid arthritis patients. Br J Clin Pharmacol. Feb 23. [Epub ahead of print]
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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. 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	18 months from date of despatch.
Acknowledgements	Rituxan® is a registered trademark of Biogen Idec/Genentech in the USA. MabThera ® is a registered trademark of Roche in Europe.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN ANTI RITUXIMAB:HRP (HCA061P)
HUMAN ANTI RITUXIMAB (HCA061)
HUMAN ANTI RITUXIMAB (HCA062)
HUMAN ANTI RITUXIMAB:HRP (HCA062P)
HUMAN ANTI RITUXIMAB (HCA186)

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