Datasheet: MCA2260 BATCH NUMBER 154394

Description:	Description: RAT ANTI RITUXIMAB		
Specificity:	RITUXIMAB		
Other names:	MabThera , Rituxan		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	MB2A4		
lsotype:	lgG2a		
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 <u>www.bio-rad-antibodies.com/protocols</u> .				
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry	•			50 ug/ml
	Immunohistology - Frozen				
	Immunohistology - Paraffin				
	ELISA	•			
	Where this product has r	not been te	ested for u	use in a particular tech	nnique this does not
	necessarily exclude its us a guide only. It is recomn system using appropriate	nended th	at the use	er titrates the product f	• •
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by supernatant	affinity ch	nromatogr	aphy on Protein G froi	m tissue culture
Buffer Solution	TRIS buffered saline				
Preservative Stabilisers	0.09% Sodium Azide (Na	aN ₃)			
Approx. Protein Concentrations	IgG concentration 1.0 mg	g/ml			

Immunogen	F(ab) ₂ fragment of Rituximab
RRID	AB_323787
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 (<u>Cragg <i>et al.</i> 2004</u> and <u>Hampson <i>et al.</i> 2010</u>).
	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 (<u>Beum <i>et al.</i> 2004</u>). 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.
ELISA	This product may be used in a direct ELISA or as a detection reagent, when conjugated to HRP, in a sandwich ELISA together with <u>HCA186</u> as the capture reagent. Protocol: <u>PK</u> <u>bridging ELISA to measure free drug</u>
References	 Cragg, M. S. <i>et al.</i> (2004) A new anti-idiotype antibody capable of binding rituximab on the surface of lymphoma cells. <u>Blood. 104:2540-2</u> Cragg, M.S. <i>et al.</i> (2004) Apparent modulation of CD20 by rituximab: an alternative explanation. <u>Blood. 103 (10): 3989-90; author reply 3990-1.</u> Pers, J.O. <i>et al.</i> (2007) BAFF-modulated repopulation of B lymphocytes in the blood and salivary glands of rituximab-treated patients with Sjögren's syndrome. <u>Arthritis Rheum. 56: 1464-77.</u> Hampson, G. <i>et al.</i> (2010) Validation of an ELISA for the determination of rituximab pharmacokinetics in clinical trials subjects. <u>J Immunol Methods. 360 (1-2): 30-8.</u> Blasco, H. <i>et al.</i> (2007) Evaluation of a peptide ELISA for the detection of rituximab in serum. <u>J Immunol Methods.325: 127-39.</u>

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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. 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	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 #10057 available at: https://www.bio-rad-antibodies.com/SDS/MCA2260	
Regulatory	For research purposes only	

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR20...) <u>RPE</u> Rabbit Anti Rat IgG (STAR17...) <u>FITC</u> Goat Anti Rat IgG (STAR69...) <u>FITC</u> Goat Anti Rat IgG (STAR73...) <u>RPE</u> **Recommended Useful Reagents**

HUMAN ANTI RITUXIMAB (HCA061) HUMAN ANTI RITUXIMAB (HCA186)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366473:200529'

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