

Monoclonal Antibody to Rituximab - FITC

Alternate names:	MabThera, Rituxan
Catalog No.:	AM05879FC-N
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	Rituximab is a therapeutic reagent directed against the human CD20 cell surface antigen.
Host / Isotype:	Rat / IgG2a
Clone:	MB2 A4
Immunogen:	F(ab)2 fragment of Rituximab
Format:	State: Liquid purified IgG fraction from Tissue Culture Supernatant Purification: Affinity Chromatography on Protein G Buffer System: PBS, pH 7.4 Preservatives: 0.09% Sodium Azide Stabilizers: 1% BSA Label: FITC
Applications:	Flow Cytometry: Use 10 µl of neat antibody to label 10 ⁶ cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody specifically recognizes the idiotypic determinants expressed by the Rituximab humanised monoclonal antibody. This antibody does not recognise other CD20 antibodies. It has been used to detect Rituximab bound to the surface of the Raji B cell line, however detection of Rituximab bound ' <i>in vivo</i> ' 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 (3).
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Bayne, M. et al. (2003) Phase I/II study of fractionated radioimmunotherapy in relapsed low grade non Hodgkin lymphoma. Br. J. Cancer. 88 : S38. 2. Cragg MS, Bayne MC, Illidge TM, Valerius T, Johnson PW, Glennie MJ. Apparent modulation of CD20 by rituximab: an alternative explanation. Blood. 2004 May 15;103(10):3989-90; author reply 3990-1. PubMed PMID: 15121717. 3. Beum PV, Kennedy AD, Li Y, Pawluczko AW, Williams ME, Taylor RP. Complement activation and C3b deposition on rituximab-opsonized cells substantially blocks binding of phycoerythrin-labeled anti-mouse IgG probes to rituximab. J Immunol Methods. 2004

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 10. Kagan L, Turner MR, Balu-lyer SV, Mager DE. Subcutaneous absorption of monoclonal antibodies: role of dose, site of injection, and injection volume on rituximab pharmacokinetics in rats. *Pharm Res*. 2012 Feb;29(2):490-9. doi: 10.1007/s11095-011-0578-3. Epub 2011 Sep 2. PubMed PMID: 21887597.
 11. Kagan L, Mager DE. Mechanisms of subcutaneous absorption of rituximab in rats. *Drug Metab Dispos*. 2013 Jan;41(1):248-55. doi: 10.1124/dmd.112.048496. Epub 2012 Nov 5. PubMed PMID: 23129212.
 12. Cragg MS, Bayne MB, Tutt AL, French RR, Beers S, Glennie MJ, et al. A new anti-idiotypic antibody capable of binding rituximab on the surface of lymphoma cells. *Blood*. 2004 Oct 15;104(8):2540-2. Epub 2004 Jun 22. PubMed PMID: 15213098.