

Datasheet: MCA1710SBUV445

Description:	MOUSE ANTI HUMAN CD20:StarBright UltraViolet 445
Specificity:	CD20
Format:	StarBright UltraViolet 445
Product Type:	Monoclonal Antibody
Clone:	2H7
Isotype:	IgG2b
Quantity:	100 TESTS/0.5ml

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	▪			Neat

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.

Target Species	Human
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Species Cross Reactivity	<p>Reacts with: Rhesus Monkey</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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Product Form	Purified IgG conjugated to StarBright UltraViolet 445 - liquid
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Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright UltraViolet 445	347	440

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
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Buffer Solution	Phosphate buffered saline
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Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
External Database Links	UniProt: P11836 Related reagents Entrez Gene: 931 MS4A1 Related reagents
Synonyms	CD20
Specificity	<p>Mouse anti Human CD20 antibody, clone 2H7 recognizes the human CD20 cell surface antigen, a 33-37 kDa non-glycosylated phosphoprotein.</p> <p>The CD20 antigen is expressed during pre-B-cell development. It is present on both resting and activated B-cells but is lost prior to terminal B-cell differentiation into plasma cells.</p> <p>The epitope recognized by clone 2H7 has been mapped to the following sequence found in the large extracellular loop of human CD20: YNCEPANPSEKNPST. Furthermore it appears that Mouse anti Human CD20 antibody, clone 2H7 only recognizes human CD20 in its native oligomeric form (Polyak <i>et al.</i> 2002).</p>
Flow Cytometry	Use 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol style="list-style-type: none"> Chan, H.T. <i>et al.</i> (2003) CD20-induced lymphoma cell death is independent of both caspases and its redistribution into triton X-100 insoluble membrane rafts. Cancer Res. 63: 5480-9. Cragg, M.S. <i>et al.</i> (2003) Complement-mediated lysis by anti-CD20 mAb correlates with segregation into lipid rafts. Blood. 101: 1045-52. Jaramillo, M.C. <i>et al.</i> (2009) Increased manganese superoxide dismutase expression or treatment with manganese porphyrin potentiates dexamethasone-induced apoptosis in lymphoma cells. Cancer Res. 69: 5450-7. Teeling, J.L. <i>et al.</i> (2006) The biological activity of human CD20 monoclonal antibodies is linked to unique epitopes on CD20. J Immunol. 177 (1): 362-71. Polyak, M.J. & Deans, J.P. (2002) Alanine-170 and proline-172 are critical determinants for extracellular CD20 epitopes; heterogeneity in the fine specificity of CD20 monoclonal antibodies is defined by additional requirements imposed by both amino acid sequence and quaternary structure. Blood. 99 (9): 3256-62. Greig, B. <i>et al.</i> (2014) Stabilization media increases recovery in paucicellular cerebrospinal fluid specimens submitted for flow cytometry testing. Cytometry B Clin Cytom. 86: 135-8. van den Akker, E. <i>et al.</i> (2010) The majority of the in vitro erythroid expansion potential

- resides in CD34(-) cells, outweighing the contribution of CD34(+) cells and significantly increasing the erythroblast yield from peripheral blood samples. [Haematologica. 95: 1594-8.](#)
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11. Grobárová V *et al.* (2016) Quambalarine B, a Secondary Metabolite from *Quambalaria cyanescens* with Potential Anticancer Properties. [J Nat Prod. 79 \(9\): 2304-14.](#)
12. Popov, J. *et al.* (2017) Unique therapeutic properties and preparation methodology of multivalent rituximab-lipid nanoparticles. [Eur J Pharm Biopharm. 117: 256-69.](#)
13. Sieg, M. *et al.* (2019) A New Genotype of Feline Morbillivirus Infects Primary Cells of the Lung, Kidney, Brain and Peripheral Blood. [Viruses. 11 \(2\): 146.](#)

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1710SBUV445 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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
'M411148:221101'

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