

Datasheet: MCA1271SBB580 BATCH NUMBER 100006949

Description:	MOUSE ANTI HUMAN CD33:StarBright Blue 580
Specificity:	CD33
Format:	StarBright Blue 580
Product Type:	Monoclonal Antibody
Clone:	WM53
Isotype:	lgG1
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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes I	No	Not Determined	Suggested Dilution		
	Flow Cytometry	•			Neat		
	Where this product has necessarily exclude its a guide only. It is recor system using appropria	use in such pro nmended that t	ocedure he use	es. Suggested working r titrates the product f	g dilutions are given as		
Target Species	Human						
Product Form	Purified IgG conjugated to StarBright Blue 580 - liquid						
Max Ex/Em	Fluorophore StarBright Blue 580	Excitation Max 475	(nm)	Emission Max (nm) 582			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide (I	NaN ₃)					
Stabilisers	1% Bovine Serum Albumin						
	0.1% Pluronic F68						
	0.1% PEG 3350						
	0.05% Tween 20						

Immunogen	Human AML cells
External Database Links	UniProt: P20138 Related reagents Entrez Gene: 945 CD33 Related reagents
Synonyms	SIGLEC3
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line
Specificity	Mouse anti Human CD33 antibody, clone WM53 recognizes the human CD33 cell surface glycoprotein. This antigen, considered to be specific for the myeloid lineage, has also been reported to be present on cells of lymphoid origin. Mouse anti Human CD33 antibody, clone WM53 immunoprecipitates a protein of ~75 kDa
	from myeloid cells, a smaller protein of approximately 67 kDa has been observed in immunoprecipitates from lymphoid targets.
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	 Favaloro, E.J. <i>et al.</i> (1987) Characterization of monoclonal antibodies to the human myeloid-differentiation antigen, gp67 (CD-33). <u>Dis Markers. 5 (4): 215-25.</u> Favaloro, E.J. <i>et al.</i> (1988) Further characterization of human myeloid antigens (gp160,95; gp150; gp67): investigation of epitopic heterogeneity and non-haemopoietic distribution using panels of monoclonal antibodies belonging to CD-11b, CD-13 and CD-33. <u>Br J Haematol. 69 (2): 163-71.</u> Hernández-Caselles, T. <i>et al.</i> (2006) A study of CD33 (SIGLEC-3) antigen expression and function on activated human T and NK cells: two isoforms of CD33 are generated by alternative splicing. <u>J Leukoc Biol. 79: 46-58.</u> Biedermann, B. <i>et al.</i> (2006) Analysis of the CD33-related siglec family reveals that Siglec-9 is an endocytic receptor expressed on subsets of acute myeloid leukemia cells and absent from normal hematopoietic progenitors. <u>Leuk Res. 31: 211-20.</u> Lajaunias, F. <i>et al.</i> (2005) Constitutive repressor activity of CD33 on human monocytes requires sialic acid recognition and phosphoinositide 3-kinase-mediated intracellular signaling. <u>Eur J Immunol. 35: 243-51.</u> Pietschmann, P. <i>et al.</i> (2000) Surface markers and transendothelial migration of dendritic cells from elderly subjects. <u>Exp Gerontol. 35: 213-24.</u> Favaloro, E.J. <i>et al.</i> (2012) Simple detection of surface antigens on activated endothelium. <u>Immunol Cell Biol. 71:571-81.</u> Yasukawa, T. <i>et al.</i> (2012) Simple detection of surface antigens on living cells by applying distinct cell positioning with negative dielectrophoresis. <u>Anal Chem. 84 (20): 8830-6.</u> Hu, Z. <i>et al.</i> (2016) Self-assembled nanoparticles based on folic acid modified

 11. Vamvakopoulos, J.E. & Green, C. (2003) HMG-CoA reductase inhibition aborts functional differentiation and triggers apoptosis in cultured primary human monocytes: a potential mechanism of statin-mediated vasculoprotection. <u>BMC Cardiovasc Disord. 3: 6.</u> 12. Vamvakopoulos, J. <i>et al.</i> (2002) Genetic control of IL-1beta bioactivity through differential regulation of the IL-1 receptor antagonist. <u>Eur J Immunol. 32 (10): 2988-96.</u> 13. Lin, C.W. <i>et al.</i> (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features.
12. Vamvakopoulos, J. <i>et al.</i> (2002) Genetic control of IL-1beta bioactivity through differential regulation of the IL-1 receptor antagonist. <u>Eur J Immunol. 32 (10): 2988-96.</u> 13. Lin, C.W. <i>et al.</i> (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features.
differential regulation of the IL-1 receptor antagonist. <u>Eur J Immunol. 32 (10): 2988-96.</u> 13. Lin, C.W. <i>et al.</i> (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features.
lymphoma/leukemia of immature natural killer cell origin with distinct clinical features.
Blood. 106 (10): 3567-74.
14. McCormack E <i>et al.</i> (2013) Multiplexed mAbs: a new strategy in preclinical
time-domain imaging of acute myeloid leukemia. <u>Blood. 121 (7): e34-42.</u>
15. Hernández-Caselles T <i>et al.</i> (2019) CD33 (Siglec-3) Inhibitory Function: Role in the NKG2D/DAP10 Activating Pathway. <u>J Immunol Res. 2019: 6032141.</u>
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 SafetyMaterial Safety Datasheet documentation #20471 available at:Information https://www.bio-rad-antibodies.com/SDS/MCA1271SBB580 20471
Regulatory For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21			
America Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50				
	Email: antibody_sales_us@bio-ra	d.com	Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com			
To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets								

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Printed on 08 Mar 2024

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