

## Datasheet: MCA1271SBUV400

Description:	MOUSE ANTI HUMAN CD33:StarBright UltraViolet 400			
Specificity:	CD33			
Format:	StarBright UltraViolet 400			
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	lo	Not Determined	Suggested Dilution	
	Flow Cytometry	-			Neat	
	Where this product ha necessarily exclude its a guide only. It is reco system using appropri	s use in such pro mmended that t	ocedur he use	es. Suggested workin r titrates the product f	g dilutions are given as	
Target Species	Human					
Product Form	Purified IgG conjugated to StarBright UltraViolet 400 - liquid					
Max Ex/Em	Fluorophore	Excitation Max	(nm)	Emission Max (nm)		
	StarBright UltraViolet 400	335		394		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant					
Buffer Solution	Phosphate buffered sa	Phosphate buffered saline				
Preservative Stabilisers	0.09% Sodium Azide ( 1% Bovine Serum Alb 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20					

Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our <u>FAQ</u> page.				
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	<b>Mouse anti Human CD33 antibody, clone WM53</b> 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 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.				
References	<ol> <li>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></li> <li>Favaloro, E.J. <i>et al.</i> (1993) Differential expression of surface antigens on activated endothelium. <u>Immunol Cell Biol. 71:571-81.</u></li> <li>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></li> <li>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></li> <li>Vamvakopoulos, J.E. &amp; 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></li> <li>Dahl C <i>et al.</i> (2004) Human mast cells cultured <i>in vitro.</i> <u>Allergy. 59 (10): 1087-96.</u></li> <li>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></li> <li>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.</li> </ol>				

	Blood. 106 (10): 3567-74. 9. 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
	<ul> <li>alternative splicing. <u>J Leukoc Biol. 79: 46-58.</u></li> <li>10. 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></li> <li>11. Yasukawa, T. <i>et al.</i> (2012) Simple detection of surface antigens on living cells by</li> </ul>
	<ul> <li>applying distinct cell positioning with negative dielectrophoresis. <u>Anal Chem. 84 (20):</u> 8830-6.</li> <li>12. 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></li> <li>13. Hu, Z. <i>et al.</i> (2016) Self-assembled nanoparticles based on folic acid modified carboxymethyl chitosan conjugated with targeting antibody <u>J Wuhan Univ of Technol-Mater. Sci. Ed. 31 (2): 446-53.</u></li> <li>14. Horméndez Caselles T et al. (2010) CD22 (Sigles 2) Inhibitary Eulering In the</li> </ul>
	14. 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 Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1271SBUV400 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	ad.com	Email: antibody_sales_uk@bio-ra	ad.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 'M43488:250224'

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