

Datasheet: MCA1271A700T

#### **BATCH NUMBER 0715**

Description:	MOUSE ANTI HUMAN CD33:Alexa Fluor® 700
Specificity:	CD33
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	WM53
Isotype:	IgG1
Quantity:	25 TESTS/0.25ml

#### **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat - 1/5

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjugat	ed to Alexa Fluor® 70	0 - liquid
lax Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	Alexa Fluor®700	702	723
reparation	Purified IgG prepared supernatant	d by affinity chromatog	raphy on Protein G
fer Solution	Phosphate buffered s	saline	
servative	0.09% Sodium Azide		
abilisers	1% Bovine Serum	Albumin	
pprox. Protein oncentrations	IgG concentration 0.0	05 mg/ml	

Immunogen	Human AML	cells	
External Database Links	<b>UniProt</b> : P20138	Related reagents	
	Entrez Gene	e:	

945 CD33 Related reagents

Synonyms	SIGLEC3

### **RRID** AB\_1101943

# **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 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul whole blood.

#### References

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- 2. Favaloro, E.J. *et al.* (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. Br J Haematol. 69 (2): 163-71.
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- 4. Biedermann, B. *et al.* (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. Leuk Res. 31: 211-20.
- 5. Lajaunias, F. *et al.* (2005) Constitutive repressor activity of CD33 on human monocytes requires sialic acid recognition and phosphoinositide 3-kinase-mediated intracellular signaling. Eur J Immunol. 35: 243-51.
- 6. Pietschmann, P. *et al.* (2000) Surface markers and transendothelial migration of dendritic cells from elderly subjects. <u>Exp Gerontol. 35: 213-24.</u>
- 7. Favaloro, E.J. *et al.* (1993) Differential expression of surface antigens on activated endothelium. <u>Immunol Cell Biol.</u> 71:571-81.
- 8. Yasukawa, T. *et al.* (2012) Simple detection of surface antigens on living cells by applying distinct cell positioning with negative dielectrophoresis. <u>Anal Chem. 84 (20):</u> 8830-6.

- 9. Hu, Z. *et al.* (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>
- 10. Dahl C *et al.* (2004) Human mast cells express receptors for IL-3, IL-5 and GM-CSF; a partial map of receptors on human mast cells cultured *in vitro*. <u>Allergy. 59 (10): 1087-96.</u>
- 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. BMC Cardiovasc Disord. 3: 6.
- 12. Vamvakopoulos, J. *et al.* (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. *et al.* (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. Blood. 106 (10): 3567-74.
- 14. McCormack E *et al.* (2013) Multiplexed mAbs: a new strategy in preclinical time-domain imaging of acute myeloid leukemia. Blood. 121 (7): e34-42.
- 15. Hernández-Caselles T *et al.* (2019) CD33 (Siglec-3) Inhibitory Function: Role in the NKG2D/DAP10 Activating Pathway. J Immunol Res. 2019: 6032141.

#### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

#### Guarantee

18 months from date of despatch.

#### **Acknowledgements**

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## Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1271A700T">https://www.bio-rad-antibodies.com/SDS/MCA1271A700T</a> 10041

#### Regulatory

For research purposes only

#### Related Products

**Recommended Negative Controls** 

#### MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 700 (MCA928A700)

#### **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

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