

Datasheet: MCA2045GA

BATCH NUMBER 0314

Description:	MOUSE ANTI HUMAN CD177
Specificity:	CD177
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEM-166
Isotype:	IgG1
Quantity:	0.1 mg

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	▪			1/50 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (1)	▪			Non-reducing conditions

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)MEM-166 recognizes CD177 under non-reducing conditions

Target Species	Human
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>
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human granulocytes.
External Database Links	<p>UniProt: Q8N6Q3 Related reagents</p> <p>Entrez Gene: 57126 CD177 Related reagents</p>
Synonyms	NB1, PRV1
Specificity	Mouse anti Human CD177 antibody, clone MEM-166 recognizes human CD177 (neutrophil glycoprotein NB1). The neutrophil NB1 antigen is expressed by 97% of the caucasian population. Antibodies against NB1 can be involved in neonatal alloimmune neutropenia (NAN).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Caruccio, L. <i>et al.</i> (2003) Expression of human neutrophil antigen-2a (NB1) is increased in pregnancy. Transfusion. 43 (3): 357-63. 2. Kissel, K. <i>et al.</i> (2002) Molecular basis of NB1 (HNA-2a, CD177) deficiency. Blood. 99 (11): 4231-3. 3. Jerke, U. <i>et al.</i> (2011) Complement receptor Mac-1 is an adaptor for NB1 (CD177)-mediated PR3-ANCA neutrophil activation. J Biol Chem. 286 (9): 7070-81. 4. Dillon, M. <i>et al.</i> (2008) Expression of the GPI-anchored receptor Prv-1 enhances thrombopoietin and IL-3-induced proliferation in hematopoietic cell lines. Leuk Res. 32: 811-9. 5. Gabillet, J. <i>et al.</i> (2012) Proteinase 3, the autoantigen in granulomatosis with polyangiitis, associates with calreticulin on apoptotic neutrophils, impairs macrophage phagocytosis, and promotes inflammation. J Immunol. 189: 2574-83. 6. Drewniak, A. <i>et al.</i> (2008) Granulocyte concentrates: prolonged functional capacity during storage in the presence of phenotypic changes. Haematologica. 93:1058-67. 7. Drewniak, A. <i>et al.</i> (2009) Changes in gene expression of granulocytes during in vivo granulocyte colony-stimulating factor/dexamethasone mobilization for transfusion purposes. Blood. 113: 5979-98. 8. Sachs, .U.J. <i>et al.</i> (2007) The neutrophil-specific antigen CD177 is a counter-receptor for platelet endothelial cell adhesion molecule-1 (CD31). J Biol Chem. 282: 23603-12. 9. Johansson, Å.C. <i>et al.</i> (2016) Impaired phagocytosis and reactive oxygen species production in phagocytes is associated with systemic vasculitis. Arthritis Res Ther. 18 (1): 92. 10. Nishimura, M. <i>et al.</i> (2007) Detection of anti-CD32 alloantibody in donor plasma

implicated in development of transfusion-related acute lung injury. [Cell Biochem Funct. 25 \(2\): 179-83.](#)

11. Pliyev, B.K. & Menshikov, M. (2012) Comparative evaluation of the role of the adhesion molecule CD177 in neutrophil interactions with platelets and endothelium. [Eur J Haematol. 89 \(3\): 236-44.](#)

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

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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.

Health And Safety Information Material Safety Datasheet documentation available at: <https://www.bio-rad-antibodies.com/SDS/MCA2045GA>
Material Safety Datasheet Documentation #10040 available at: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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

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