Datasheet: MCA2045APC

Description:	MOUSE ANTI HUMAN CD177:APC
Specificity:	CD177
Format:	APC
Product Type:	Monoclonal Antibody
Clone:	MEM-166
Isotype:	IgG1
Quantity:	100 TESTS

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 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.

Target Species

Human

Species Cross Reactivity

Reacts with: Rhesus Monkey
N.B. Antibody reactivity and working conditions may vary between species.

Product Form

Purified IgG conjugated to Allophycocyanin (APC) - lyophilised

Reconstitution

Reconstitute with 1ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
APC	650	661

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin
5% Sucrose

Approx. Protein Concentrations

IgG concentration 0.1mg/ml

Immunogen

Human granulocytes.

External Database Links	**UniProt:** Q8N6Q3 Related reagents **Entrez Gene:** 57126 CD177 Related reagents
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	1. Caruccio, L. *et al.* (2003) Expression of human neutrophil antigen-2a (NB1) is increased in pregnancy. Transfusion. 43 (3): 357-63. 2. Kissel, K. *et al.* (2002) Molecular basis of NB1 (HNA-2a, CD177) deficiency. Blood. 99 (11): 4231-3. 3. Jerke, U. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (2008) Granulocyte concentrates: prolonged functional capacity during storage in the presence of phenotypic changes. Haematologica. 93:1058-67. 7. Drewniak, A. *et al.* (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. *et al.* (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. *et al.* (2016) Impaired phagocytosis and reactive oxygen species production in phagocytes is associated with systemic vasculitis. Arthritis Res Ther. 18 (1): 92. 10. Nishimura, M. *et al.* (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. 12. Onodera, R. *et al.* (2017) Anti-human neutrophil antigen-1a, -1b, and -2 antibodies in neonates and children with immune neutropenias analyzed by extracted granulocyte antigen immunofluorescence assay. Transfusion. Aug 20 [Epub ahead of print].
Storage	Prior to reconstitution store at +4ºC. After reconstitution store at +4ºC. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of reconstitution.
Health And Safety	Material Safety Datasheet documentation #10075 available at:

Information	10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:APC (MCA928APC)

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
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Printed on 05 May 2018