

Datasheet: MCA2045

Description:	MOUSE ANTI HUMAN CD177
Specificity:	CD177
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEM-166
Isotype:	IgG1
Quantity:	0.2 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	Reacts with: Rhesus Monkey N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A.
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**

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 10⁶ 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

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.

Shelf Life

18 months from date of despatch.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

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

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 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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