

TECHNICAL DATA SHEET

CyFlow™ CD177 PE Anti-Hu; Clone MEM-166

REF BJ305247

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD177
Alternative Names	NB-1, NB1, HNA-2a, HNA2A, PRV1
Clone	MEM-166
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human granulocytes

Specificity

The mouse monoclonal antibody MEM-166 recognizes CD177 antigen, a 60 kDa GPI-linked cell surface glycoprotein of uPAR family, expressed on granulocytes and in bone marrow early erythroblasts, megakaryocytes, promyelocytes and myelocytes.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD177 (NB1, HNA-2a and PRV-1 form) is a GPI-anchored glycoprotein present mainly on neutrophils. Its plasma membrane expression is increased during pregnancy and inflammation or after G-CSF application. Ligand of CD177 has been identified as CD31 (PECAM-1). CD177 participates in neutrophil transmigration and seems to be also a pro-proliferative molecule. The antibodies against CD177 can be involved in neonatal alloimmune neutropenia (NAN).

References

- Kishimoto T, Goyert S, Kikutani H, Mason D, Miyasaka M, Moretta L, Ohno T, Okumura K, Shaw S, Springer TA, Sugamura K, Sugawara H, von dem Borne AEGK, Zola H (Eds): Leucocyte Typing VI. Garland Publishing Inc, New York. 1997; 1-1342. < NLM ID: 9712219 >
- Mason D, Simmons D, Buckley C, Schwartz-Albiez R, Hadam M, Saalmuller A, Clark E, Malavasi F, Morrissey JA (Eds): Leucocyte Typing VII. Oxford University Press. 2002; 1-945. < NLM ID: 101177131 >
- Stroncek DF, Caruccio L, Bettinotti M: CD177: A member of the Ly-6 gene superfamily involved with neutrophil proliferation and polycythemia vera. J Transl Med. 2004 Mar 29; 2(1):8. < PMID: 15050027 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Mnjoyan Z, Li J, Afshar-Kharghan V: Expression of polycythemia rubra vera-1 decreases the dependency of cells on growth factors for proliferation. Haematologica. 2005 Mar; 90(3):405-6. < PMID: 15749675 >
- Bauer S, Abdgawad M, Gunnarsson L, Segelmark M, Tapper H, Hellmark T: Proteinase 3 and CD177 are expressed on the plasma membrane of the same subset of neutrophils. J Leukoc Biol. 2007 Feb; 81(2):458-64. < PMID: 17077162 >
- Sachs UJ, Andrei-Selmer CL, Maniar A, Weiss T, Paddock C, Orlova VV, Choi EY, Newman PJ, Preissner KT, Chavakis T, Santoso S: The neutrophil-specific antigen CD177 is a counter-receptor for platelet endothelial cell adhesion molecule-1 (CD31). J Biol Chem. 2007 Aug 10; 282(32):23603-12. < PMID: 17580308 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com