



A7-314-T025

## Monoclonal Antibody to CD177 Alexa Fluor® 700 conjugated (25 tests)

<b>Clone:</b>	MEM-166
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-166 reacts with CD177 (Neutrophil specific antigen 1), a 60 kDa GPI-linked cell surface glycoprotein of uPAR family, expressed on granulocytes and in bone marrow early erythroblasts, megakaryocytes, promyelocytes and myelocytes. HLDA VI; WS Code M M17 HLDA VI; WS Code BP 309
<b>Immunogen:</b>	Human granulocytes
<b>Species Reactivity:</b>	Human, Non-Human Primates
<b>Preparation:</b>	The purified antibody is conjugated with Alexa Fluor® 700 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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).

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Leukocyte Typing VII., Mason D. et al. (Eds.), Oxford University Press (2002).
- \*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.
- \*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.
- \*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.
- \*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.
- \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

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