



PB-275-T100

Monoclonal Antibody to CD108 Pacific Blue™ conjugated (100 tests)

Clone:	MEM-150
Isotype:	Mouse IgM
Specificity:	The antibody MEM-150 reacts with CD108 (JMH blood group antigen), a 80 kDa GPI-anchored glycoprotein expressed on various cell types including erythrocytes, lymphoblasts; at low levels it is present on circulating lymphocytes. HLDA V; WS Code AS S017 HLDA V; WS Code BP BP347 HLDA VI; WS Code BP 401 HLDA VI; WS Code BP 475 HLDA VI; WS Code NL N-L156 HLDA VI; WS Code P PR-65
Immunogen:	HPB-ALL human T cell line
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Pacific Blue [®] under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	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.
Storage / Stability:	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.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD108 (Sema7A) is a GPI-anchored semaphorin family member, which enhances central and peripheral axonal growth and is required for proper axon track formation during embryogenesis. CD108 also regulates osteoclast differentiation and pre-osteoblastic cell migration, and in immune system affects cell proliferation, chemotaxis and cytokine release. On erythrocytes CD108 defines the JMH (John-Milton-Hagen) human blood group. CD108 signalizes through its receptors plexin C1 and beta1 integrins.

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

**Antibodies**

- References:**
- *Pasterkamp RJ, Peschon JJ, Spriggs MK, Kolodkin AL: Semaphorin 7A promotes axon outgrowth through integrins and MAPKs. *Nature*. 2003 Jul 24;424(6947):398-405.
 - *Delorme G, Saltel F, Bonnelye E, Jurdic P, Machuca-Gayet I: Expression and function of semaphorin 7A in bone cells. *Biol Cell*. 2005 Jul;97(7):589-97.
 - *Pasterkamp RJ, Kolk SM, Hellemons AJ, Kolodkin AL: Expression patterns of semaphorin7A and plexinC1 during rat neural development suggest roles in axon guidance and neuronal migration. *BMC Dev Biol*. 2007 Aug 29;7:98.
 - *Suzuki K, Okuno T, Yamamoto M, Pasterkamp RJ, Takegahara N, Takamatsu H, Kitao T, Takagi J, Rennert PD, Kolodkin AL, Kumanogoh A, Kikutani H: Semaphorin 7A initiates T-cell-mediated inflammatory responses through alpha1beta1 integrin. *Nature*. 2007 Apr 5;446(7136):680-4.
 - *Mudad R, Rao N, Angelisova P, Horejsi V, Telen MJ.: Evidence that CDw108 membrane protein bears the JMH blood group antigen. *Transfusion*. 1995 Jul;35(7):566-70.
 - *Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
 - *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
 - *Angelisova P, Drbal K, Cerny J, Hilgert I, Horejsi V.: Characterization of the human leukocyte GPI-anchored glycoprotein CDw108 and its relation to other similar molecules. *Immunobiology*. 1999 Jun;200(2):234-45.

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