

TECHNICAL DATA SHEET

CyFlow™ CD108 FITC Anti-Hu; Clone MEM-150

REF BU957025

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

Specifications

Antigen	CD108
Alternative Names	SEMA7A, GPI-gp80, JMH, Sema K1
Clone	MEM-150
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgM
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	HPB-ALL human T cell line

Specificity

The mouse monoclonal antibody MEM-150 recognizes CD108 antigen, a 80 kDa GPI-anchored glycoprotein expressed on various cell types including erythrocytes, lymphoblasts; at low levels it is present on circulating lymphocytes.

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 Tris buffered saline (TBS) solution, pH ≈8.0, 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

CD108 (SEMA7A; Semaphorin 7A) 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 β1 integrins.

References

- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- 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. < PMID: 7631388 >
- 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 >

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

- Angelisová 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. < PMID: 10416131 >
- 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. < PMID: 12879062 >
- 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. < PMID: 15859945 >
- 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. < PMID: 17377534 >
- 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. < PMID: 17727705 >

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