TECHNICAL DATA SHEET

CyFlow™ CD229 PE

Anti-Hu; Clone HLy9.25

REF **AN938951**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD229
Alternative Names	Ly-9, SLAMF3, hly9, mLY9
Clone	HLy9.25
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	CD299-transfected 300.19 pre-B cell line

Specificity

The mouse monoclonal antibody HLy9.25 (HLy9.1.25) recognizes CD229 antigen, a 100-120 kDa cell surface glycoprotein expressed on T and B cells.

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 10^6 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

CD229 (Ly9) is a cell surface receptor of the CD150 family, which includes also e.g. CD48 and CD224. Receptors of this family regulate cytokine production and cytotoxicity of lymphocytes and NK cells. High levels of CD229 are found on T and B cells, where its expression increases during their maturation. It is absent on granulocytes, bone marrow-derived dendritic cells, platelets and erythrocytes. CD229 has been also reported on mouse monocytes and NK cells. CD229 interacts homophilically through its N-terminal domain and localizes to the contact site between T cells and antigen presenting B cells during antigen-dependent immune synapse formation.

References

- de la Fuente MA, Tovar V, Villamor N, Zapater N, Pizcueta P, Campo E, Bosch J, Engel P: Molecular characterization and expression of a novel human leukocyte cell-surface marker homologous to mouse Ly-9. Blood. 2001 Jun 1; 97(11):3513-20. < PMID: 11369645 >
- Del Valle JM, Engel P, Martín M: The cell surface expression of SAP-binding receptor CD229 is regulated via its interaction with clathrin-associated adaptor complex 2 (AP-2). J Biol Chem. 2003 May 9; 278(19):17430-7. < PMID: 12621057 >

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- Romero X, Benítez D, March S, Vilella R, Miralpeix M, Engel P: Differential expression of SAP and EAT-2-binding leukocyte cell-surface molecules CD84, CD150 (SLAM), CD229 (Ly9) and CD244 (2B4). Tissue Antigens. 2004 Aug; 64(2):132-44. < PMID: 15245368 >
- Martín M, Del Valle JM, Saborit I, Engel P: Identification of Grb2 as a novel binding partner of the signaling lymphocytic activation molecule-associated protein binding receptor CD229. J Immunol. 2005 May 15; 174(10):5977-86. < PMID: 15879090 >
- Romero X, Zapater N, Calvo M, Kalko SG, de la Fuente MA, Tovar V, Ockeloen C, Pizcueta P, Engel P: CD229 (Ly{09} lymphocyte cell surface receptor interacts homophilically through its N-terminal domain and relocalizes to the immunological synapse. J Immunol. 2005 Jun 1; 174(11):7033-42. < PMID: 15905546 >
- Bund D, Mayr C, Kofler DM, Hallek M, Wendtner CM: Human Ly9 (CD229 as novel tumor-associated antigen (TAA) in chronic lymphocytic leukemia (B-CLL) recognized by autologous CD8+ T cells. Exp Hematol. 2006 Jul; 34(7):860-9. < PMID: 16797413 >
- Sintes J, Romero X, Marin P, Terhorst C, Engel P: Differential expression of CD150 (SLAM) family receptors by human hematopoietic stem and progenitor cells. Exp Hematol. 2008 Sep; 36(9):1199-204. < PMID: 18495325 >

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

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