

1P-618-T025

## Monoclonal Antibody to CD229 Phycoerythrin (PE) conjugated (25 tests)

Clone: HLy9.25

**Isotype:** Mouse IgG1

**Specificity:** The mouse monoclonal antibody HLy9.25 (also known as HLy9.1.25) recognizes

CD229 / Ly9, a 100-120 kDa cell surface glycoprotein expressed on T and B cells.

Regulatory Status: RUO

Immunogen: CD299-transfected 300.19 pre-B cell line

See vial label

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) 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 stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

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.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

20 μl reagent / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (0.5 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number:

Background: 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.



## PRODUCT DATA SHEET

## References:

\*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.

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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.

\*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.

\*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.

\*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.

\*Romero X, Zapater N, Calvo M, Kalko SG, de la Fuente MA, Tovar V, Ockeloen C, Pizcueta P, Engel P: CD229 (Ly9) 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.

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