

1P-419-T025

## Monoclonal Antibody to CD235a Phycoerythrin (PE) conjugated (25 tests)

<b>Clone:</b>	HIR2
<b>Isotype:</b>	Mouse IgG2b
<b>Specificity:</b>	The antibody HIR2 recognizes N-terminal portion of glycoprotein A (and weakly of glycoprotein B). Its antigen is expressed on early erythroblasts, late erythroblasts, erythroblasts, mature erythrocytes and the cells of erythroid cell lines K562 and HEL, but not on all other cells. HLDA VII; WS Code 70299
<b>Immunogen:</b>	Synthetic peptide (Human, N-terminal)
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	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.
<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 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.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD235a (Glycophorin A, GPA) is a transmembrane sialoglycoprotein expressed on erythrocytes and their precursors. Similarly to glycoprotein B (GPB), these molecules provide the cells with a large mucin-like surface, which minimalizes aggregation between erythrocytes in the circulation. GPA is the carrier of blood group M and N specificities, while GPB accounts for S, s and U specificities. CD235a is a receptor of Hsa, an Streptococcus adhesin.

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



**Antibodies**

**References:**

- \*Nakahata T and Okumura N: Cell surface antigen expression in human erythroid progenitors: erythroid and megakaryocytic markers. *Leuk Lymphoma*. 1994;13: 401.
- \*Rogers CE, Bradley MS, Palsson BO et al: Flow cytometric analysis of human bone marrow perfusion cultures: erythroid development and relationship withburst-forming units-erythroid. *Exp Hematol*. 1996; 24: 597.
- Bain BJ: *Leukemia Diagnosis: a guide to the FAB classification*. Gower Medical Publishing; 1990.
- Keren DF, Hanson CA and Hurtubise PE, eds.: *Flow Cytometry and Clinical Diagnosis*. Chicago, IL: ASCP Press; 1994.
- \*Yajima A, Urano-Tashiro Y, Shimazu K, Takashima E, Takahashi Y, Konishi K: Hsa, an adhesin of *Streptococcus gordonii* DL1, binds to alpha2-3-linked sialic acid on glycophorin A of the erythrocyte membrane. *Microbiol Immunol*. 2008;52(2):69-77.
- \*Leukocyte Typing VII., Mason D. et al. (Eds.), Oxford University Press (2002); p.577-582.

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