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Monoclonal Antibody to CD235A / GYPA - FITC -

Alternate names: GPA, Glycophorin-A, MN sialoglycoprotein, PAS-2, Sialoglycoprotein alpha

Catalog No.: SM3141F

Quantity: 100 Tests

Background: CD235a (Glycophorin A, GPA) is a transmembrane sialoglycoprotein expressed on erythrocytes and their precursors. Similarly to glycophorin 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.

Uniprot ID: P02724

NCBI: NP_002090.4

GeneID: 2993

Host / Isotype: Mouse / IgG2b

Clone: HIR2

Immunogen: Synthetic peptide (Human, N-terminal)

Format: **State:** Liquid purified Ig fraction
Buffer System: 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
Label: FITC – Conjugated with Fluorescein isothiocyanate

Applications: Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes N-terminal portion of glycophorin A (and weakly of glycophorin 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.
Species: Human.
Other species not tested.

Storage: Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Shelf life: one year from despatch.

General References:
1. Nakahata T and Okumura N.: Cell surface antigen expression in human erythroid progenitors: erythroid and megakaryocytic markers. Leuk Lymphoma. 1994;13: 401.
2. 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.
3. Keren DF, Hanson CA and Hurtubise PE, eds.: Flow Cytometry and Clinical Diagnosis. Chicago, IL: ASCP Press; 1994.
4. 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.
5. Leukocyte Typing VII., Mason D. et al. (Eds.), Oxford University Press (2002); p.577-582.