

11-419-C100

## Monoclonal Antibody to CD235a Purified Antibody (0.1 mg)

Clone:	HIR2
lsotype:	Mouse IgG2b
Specificity:	The antibody HIR2 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. HLDA VII; WS Code 70299
Regulatory Status:	RUO
Immunogen:	Synthetic peptide (Human, N-terminal)
Species Reactivity:	Human
Application:	Flow Cytometry This HIR2 antibody has been tested by flow cytometric analysis of human peripheral blood leukocytes and cell agglutination assay and can be used at approximately 0.1 µg per million cells. Immunohistochemistry (frozen sections) Agglutination The antibody HIR2 agglutinates untreated RBCs but failes to agglutinate papain-treated cells.
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
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.

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:

\*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.

\*Sponaas AM, Moharrami NN, Feyzi E, Standal T, Holth Rustad E, Waage A, Sundan A: PDL1 Expression on Plasma and Dendritic Cells in Myeloma Bone Marrow Suggests Benefit of Targeted anti PD1-PDL1 Therapy. PLoS One. 2015 Oct 7;10(10):e0139867.

\*Kyttälä A, Moraghebi R, Valensisi C, Kettunen J, Andrus C, Pasumarthy KK, Nakanishi M, Nishimura K, Ohtaka M, Weltner J, Van Handel B, Parkkonen O, Sinisalo J, Jalanko A, Hawkins RD, Woods NB, Otonkoski T, Trokovic R: Genetic Variability Overrides the Impact of Parental Cell Type and Determines iPSC Differentiation Potential.

\*Woo AJ, Kim J, Xu J, Huang H, Cantor AB: Role of ZBP-89 in human globin gene regulation and erythroid differentiation. Blood. 2011 Sep 29;118(13):3684-93.

\*Marino JH, Tan C, Taylor AA, Bentley C, Van De Wiele CJ, Ranne R, Paliotta M, Broughan TA, Teague TK: Differential IL-7 responses in developing human thymocytes. Hum Immunol. 2010 Apr;71(4):329-33.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

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