Antibodies

Anti-Human CD235a (Glycophorin A) Antibody, Clone 2B7, FITC

Mouse monoclonal IgG1 antibody against human CD235a (glycophorin A), FITC-conjugated

Catalog #60152FI 100 Tests 20 µL/test

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Product Description

The 2B7 antibody reacts with CD235a (Glycophorin A), a 10 kDa type I sialoglycoprotein present in the cell membrane of erythrocytes and erythroid precursors as a homodimer. Glycophorin A bears the antigenic determinants for the MN and Ss blood groups and has been proposed to provide a large mucin-like surface to erythrocytes that acts to minimize aggregation in circulation. Glycophorin A is first detectable on morphologically recognizable erythroid precursors just after the colony-forming unit erythroid (CFU-E) stage, and reaches its maximal expression at the late normoblast stage. Anti-glycophorin is useful in combination with anti-transferrin receptor (CD71) to identify distinct stages of erythroid differentiation since CD71 expression precedes Glycophorin A expression, but is lost during maturation of normoblasts into mature red blood cells (RBCs). Peptide-binding ELISA data indicate that the epitope of the 2B7 antibody is located in the extracellular domain of CD235a within the sequence Ala54 - Ser66 (AATPRAHEVSEIS).

Target Antigen Name:	CD235 (Glycophorin)
Alternative Names:	Glycophorin A, GYPA, MN sialoglycoprotein, MNS blood group, PAS-2, Sialoglycoprotein alpha
Gene ID:	2993
Species Reactivity:	Human
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	2B7
Isotype:	IgG1, kappa
Immunogen:	Cell lysate containing partially lysed human red blood cells
Conjugate:	FITC

Applications

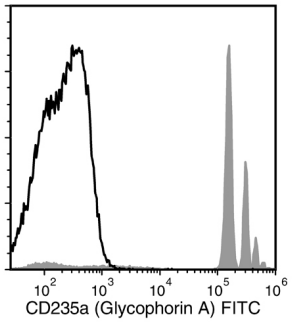
Verified:	FC
Reported:	ELISA, FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline containing 0.1% bovine serum albumin and < 0.1% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is 20 µL per 1 x 10^6 cells in 100 µL. This volume is usually appropriate for labeling samples containing mature RBCs, but may be too high for labeling immature RBCs in samples that have been depleted of mature RBCs. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human whole blood labeled with Anti-Human CD235a (Glycophorin A) Antibody, Clone 2B7, FITC (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, FITC (Catalog #60070FI; solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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