

Anti-Human CD22 Antibody, Clone HIB22, FITC

Antibodies

Mouse monoclonal IgG1 antibody
against human, chimpanzee CD22,
FITC-conjugated

Catalog #60083FI

100 Tests 5 µL/test



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Product Description

The HIB22 antibody reacts with CD22 (Siglec-2), a type I transmembrane glycoprotein expressed in the cytoplasm of pro-B and pre-B cells and on the surface of mature and activated B cells and B cell lymphomas, but not on plasma cells. CD22 functions as an inhibitory receptor for B cell receptor signaling and plays roles in modulating the activation threshold of B cells and controlling CD40 signaling. CD22 comprises two isoforms generated by alternative splicing: CD22 α (~130 kDa) and CD22 β (~140 kDa). Monomeric CD22 β is the most abundant isoform but an $\alpha\beta$ heterodimer is also expressed. CD22 is a member of the sialoadhesion subgroup within the immunoglobulin superfamily, with an N-terminal V-type Ig domain followed by six C2-type Ig domains. Binding of the HIB22 antibody reportedly requires the presence of the two N-terminal-most domains. Both the cytoplasmic and surface-bound forms of CD22 are recognized by the HIB22 antibody and its binding does not inhibit CD22-mediated cyto-adhesion.

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|----------------------|--|
| Target Antigen Name: | CD22 |
| Alternative Names: | B-lymphocyte cell adhesion molecule, BLCAM, Leu-14, Lyb8, Sialic acid-binding Ig-like lectin 2, Siglec-2 |
| Gene ID: | 933 |
| Species Reactivity: | Human, Chimpanzee |
| Host Species: | Mouse |
| Clonality: | Monoclonal |
| Clone: | HIB22 |
| Isotype: | IgG1, kappa |
| Immunogen: | Hairy cell leukemia cells |
| Conjugate: | FITC |

Applications

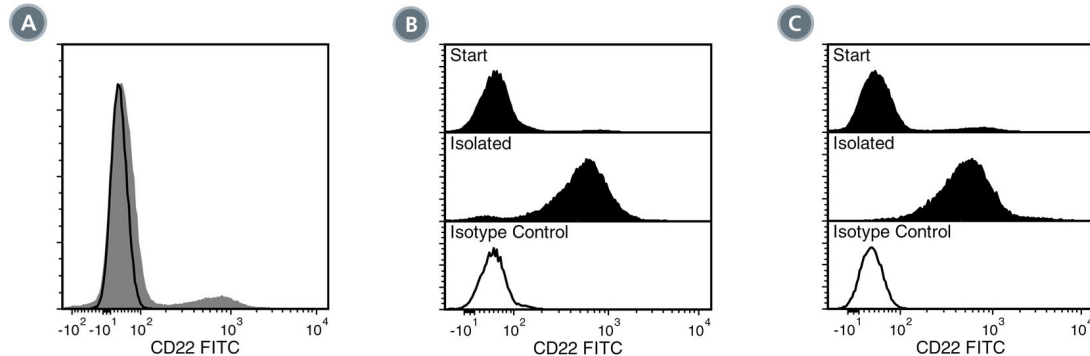
| | |
|-----------------------|--|
| Verified: | FC |
| Reported: | FC |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood B Cell Positive Selection Kit (Catalog #18184HLA) and EasySep™ Human CD19 Positive Selection Kit (Catalog #18054). |

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

Properties

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|------------------------|--|
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin |
| Purification: | The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC. |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com. |
| Directions for Use: | For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10 ⁶ cells in 100 µL volume or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application. |

Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD22 Antibody, Clone HIB22, FITC (filled histogram) or a mouse IgG1, kappa FITC isotype control antibody (solid line histogram).

(B) Flow cytometry analysis of human buffy coat nucleated cells processed with the EasySep™ HLA Whole Blood B Cell Positive Selection Kit and labeled with Anti-Human CD22 Antibody, Clone HIB22, FITC. Histograms show labeling of buffy coat nucleated cells (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa FITC isotype control antibody is shown (solid line histogram).

(C) Flow cytometry analysis of human PBMCs processed with the EasySep™ Human CD19 Positive Selection Kit and labeled with Anti-Human CD22 Antibody, Clone HIB22, FITC. Histograms show labeling of PBMCs (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa FITC isotype control antibody is shown (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, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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2. Tateno H et al. (2007) Distinct endocytic mechanisms of CD22 (Siglec-2) and Siglec-F reflect roles in cell signaling and innate immunity. *Mol Cell Biol* 27(16): 5699–710. (FA, ICC, IF)
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4. Schlossman SF et al. (Eds.). (1995) CD22. In: *Leucocyte Typing V: White cell differentiation antigens* (pp. 523–30). New York: Oxford University Press.
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