Anti-Human CD22 Antibody, Clone HIB22, APC

Antibodies

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

Catalog #60083AZ 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: CD22α (~130 kDa) and CD22β (~140 kDa). Monomeric CD22β is the most abundant isoform but an αβ 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.

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:	APC

Applications

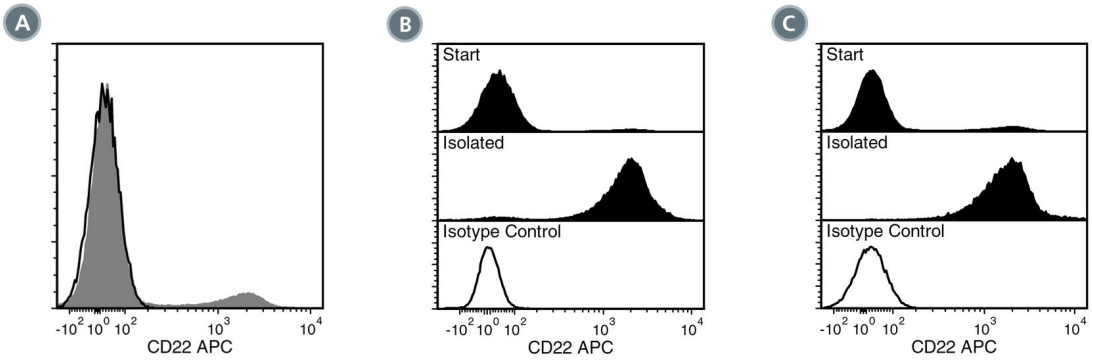
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood B Cell Positive Selection Kit (Catalog #18184HLA) and EasySep™ Human CD19 Positive Selection Kit (Catalog #18054).

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

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 APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
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, APC (filled histogram) or a mouse IgG1, kappa APC 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, APC. Histograms show labeling of buffy coat nucleated cells (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa APC 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, APC. Histograms show labeling of PBMCs (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa APC 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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