

Anti-Human CD22 Antibody, Clone HIB22

Antibodies

Mouse monoclonal IgG1 antibody
against human, chimpanzee CD22,
unconjugated

Catalog #60083

100 µg 0.5 mg/mL



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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.

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:	Unconjugated

Applications

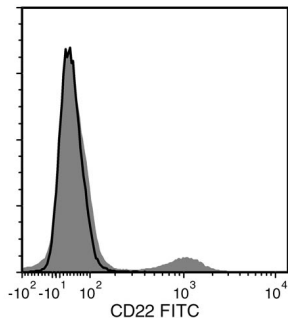
Verified:	FC
Reported:	ELISA, FA, FC, ICC, IF, IHC, IP
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood B Cell Positive Selection Kit (Catalog #18184HLA) and EasySep™ Human CD19 Positive Selection 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
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 ≤ 2 µg per 1×10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD22 Antibody, Clone HIB22, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or a mouse IgG1, kappa isotype control antibody, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (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

1. Chen WC et al. (2010) In vivo targeting of B-cell lymphoma with glycan ligands of CD22. *Blood* 115(23): 4778–86. (ICC, IF)
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)
3. Yang Z-Q et al. (2002) Synthesis of a multivalent display of a CD22-binding trisaccharide. *Carbohydr Res* 337(18): 1605–13. (FC)
4. Schlossman SF et al. (Eds.). (1995) CD22. In: *Leucocyte Typing V: White cell differentiation antigens* (pp. 523–30). New York: Oxford University Press.
5. Shan D & Press OW. (1995) Constitutive endocytosis and degradation of CD22 by human B cells. *J Immunol* 154(9): 4466–75.
6. Leprince C et al. (1993) CD22 associates with the human surface IgM-B-cell antigen receptor complex. *Proc Natl Acad Sci USA* 90(8): 3236–40.
7. Stamenkovic I et al. (1991) The B lymphocyte adhesion molecule CD22 interacts with leukocyte common antigen CD45RO on T cells and alpha 2-6 sialyltransferase, CD75, on B cells. *Cell* 66(6): 1133–44.
8. Wilson GL et al. (1991) cDNA cloning of the B cell membrane protein CD22: a mediator of B-B cell interactions. *J Exp Med* 173(1): 137–46.

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