Antibodies

Anti-Human CD19 Antibody, Clone HIB19, Biotin

Mouse monoclonal IgG1 antibody against human, chimpanzee CD19, biotin-conjugated

Catalog #60005BT	100 µg	0.5 mg/mL
#60005BT.1	25 µg	0.5 mg/mL

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Product Description

The HIB19 antibody reacts with CD19, an ~95 kDa type 1 transmembrane glycoprotein expressed on the surface of B cells throughout all stages of development, from early pre-B cells to plasma cells. Expression is down-regulated but persists in terminally differentiated plasma cells. CD19 is also found on follicular dendritic cells. By associating with CD21 and CD81, CD19 functions as a co-receptor for the B cell receptor and is involved in B cell activation and differentiation. Activation of CD19 is accompanied by phosphorylation of the cytoplasmic domain, which promotes binding to kinases and the induction of intracellular signaling cascades. Mutations in CD19 can result in severe immunodeficiency syndromes.

Target Antigen Name:	CD19
Alternative Names:	B4
Gene ID:	930
Species Reactivity:	Human, Chimpanzee
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	HIB19
Isotype:	IgG1, kappa
Immunogen:	Human CD19 purified from tonsil
Conjugate:	Biotin

Applications

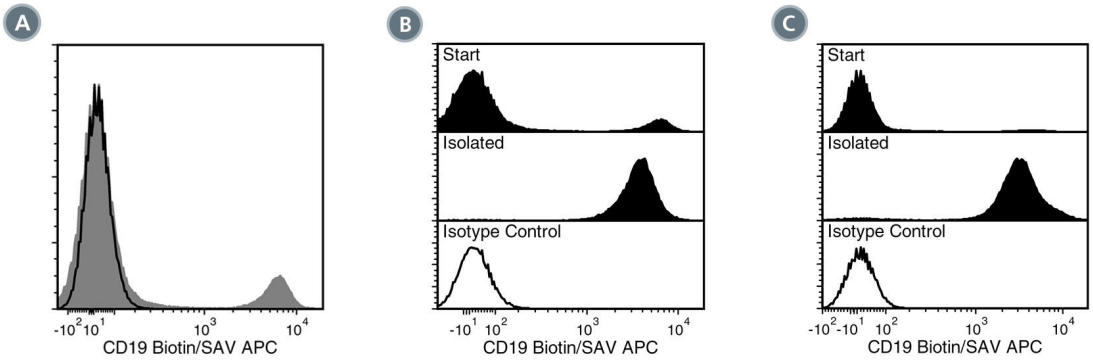
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human CD19 Positive Selection Kit (Catalog #18054), EasySep™ Human Whole Blood CD19 Positive Selection Kit (Catalog #18084), and EasySep™ HLA Whole Blood B Cell Positive Selection Kit (Catalog #18184HLA); partial blocking may be observed, as well as EasySep™ HLA B Cell Enrichment: Complete Processing Kit for Whole Blood (Catalog #19954HLA) and EasySep™ HLA Total Lymphocyte Enrichment: Complete Processing Kit for Whole Blood (Catalog #19961HLA).

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 and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
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 ≤ 0.5 µg per 1 x 10^6 cells in 100 µL volume. 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 CD19 Antibody, Clone HIB19, Biotin followed by streptavidin (SAV) APC (filled histogram) or a mouse IgG1, kappa biotin isotype control antibody followed by SAV APC (solid line histogram).
(B) Flow cytometry analysis of human PBMCs processed with the EasySep™ Human CD19 Positive Selection Kit and labeled with Anti-Human CD19 Antibody, Clone HIB19, Biotin followed by streptavidin (SAV) APC. Histograms show labeling of PBMCs (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa biotin isotype control antibody followed by SAV APC is shown (solid line histogram).
(C) 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 CD19 Antibody, Clone HIB19, Biotin followed by streptavidin (SAV) APC. Histograms show labeling of buffy coat nucleated cells (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa biotin isotype control antibody followed by SAV APC 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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