

**Anti-Human CD19 Antibody,  
Clone HIB19, Alexa Fluor® 488**



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## Antibodies

Mouse monoclonal IgG1 antibody  
against human, chimpanzee CD19,  
Alexa Fluor® 488-conjugated

Catalog #60005AD

100 Tests 5 µL/test

## 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:	Alexa Fluor® 488

## Applications

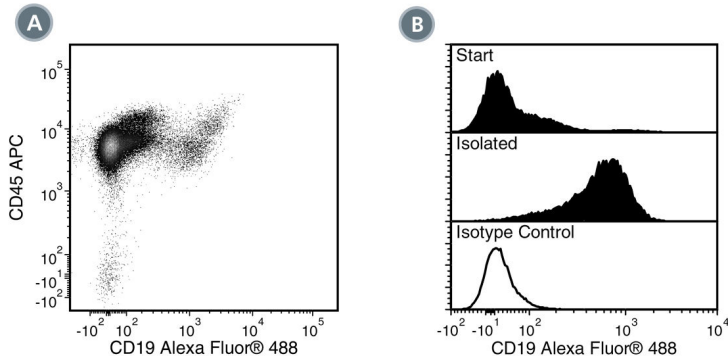
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human CD19 Positive Selection Kit (Catalog #18054), EasySep™ Human Whole Blood CD19 Positive Selection Kit (Catalog #18084), and EasySep™ 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 and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.
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 <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10 <sup>6</sup> 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 CD19 Antibody, Clone HIB19, Alexa Fluor® 488 and anti-human CD45 APC.

(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, Alexa Fluor® 488. Histograms show labeling of the PBMCs (Start) and isolated cells (Isolated). Labeling with a mouse IgG1, kappa Alexa Fluor® 488 isotype control antibody is shown in the bottom panel (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](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Lagresle-Peyrou C, et al. (2014) The BLNK adaptor protein has a nonredundant role in human B-cell differentiation. *J Allergy Clin Immunol* 134(1): 145-54. (FACS, FC)
2. Lepore M et al. (2014) A novel self-lipid antigen targets human T cells against CD1c(+) leukemias. *211(7): 1363-77.* (FC)
3. Mei HE et al. (2012) Rationale of anti-CD19 immunotherapy: an option to target autoreactive plasma cells in autoimmunity. *Arthritis Res Ther* 14(Suppl 5): S1. (FC)
4. Caraux A et al. (2010) Circulating human B and plasma cells. Age-associated changes in counts and detailed characterization of circulating normal CD138- and CD138+ plasma cells. *Haematologica* 95(6): 1016-20. (FC)
5. Walker JD et al. (2009) Cytomegalovirus-infected human endothelial cells can stimulate allogeneic CD4+ memory T cells by releasing antigenic exosomes. *J Immunol* 182(3): 1548-59. (Immunodepletion)
6. Yoshino N et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp Anim* 49(2): 97-110. (FC)
7. Schlossman SF et al. (Eds.). (1995) *Leucocyte Typing V*. New York: Oxford University Press.
8. Zhou LJ et al. (1992) Structure of the genes encoding the CD19 antigen of human and mouse B lymphocytes. *Immunogenetics* 35(2): 102-11.

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