Antibodies

Anti-Mouse CD19 Antibody, Clone 6D5

Rat monoclonal IgG2a antibody against mouse CD19, unconjugated

Catalog #60006  500 μg  0.5 mg/mL

Product Description

The 6D5 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. Clone 6D5 recognizes the same epitope as clone ID3 in cross-competition assays.

Target Antigen Name: CD19
Alternative Names: B4
Gene ID: 12478
Species Reactivity: Mouse
Host Species: Rat
Clonality: Monoclonal
Clone: 6D5
Isotype: IgG2a, kappa
Immunogen: Human K562 erythroleukemia cells expressing full-length recombinant mouse CD19
Conjugate: Unconjugated

Applications

Verified: CellSep, FC
Reported: CyTOF®, FC, ICC, IF, IHC, IP, WB
Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse B Cell Isolation Kit (Catalog #19854).

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 ≤ 1 μg per 1 x 10^6 cells in 100 μL. It is recommended that the antibody be titrated for optimal performance for each application.
Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD19 Antibody, Clone 6D5, followed by a mouse anti-rat IgG2a antibody, FITC (filled histogram), or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758 (Catalog #60076) followed by a mouse anti-rat IgG2a antibody, FITC (solid line histogram).

Data

References

1. Ding Y et al. (2014) Interleukin-21 promotes germinal center reaction by skewing the follicular regulatory T cell to follicular helper T cell balance in autoimmune BXD2 mice. Arthritis Rheumatol 66(9): 2601–12. (FC).