

Anti-CD19 [B4] Bulk Size Ab02210-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, [Fc Silent™](#), Kappa

Clone Number: B4

Alternative Name(s) of Target: B4 antigen; B-lymphocyte antigen CD19; B-lymphocyte surface antigen B4; Differentiation antigen CD19; T-cell surface antigen Leu-12

UniProt Accession Number of Target Protein: P15391

Published Application(s): FC, IF, IHC

Published Species Reactivity: Human

Immunogen: The original antibody was generated against CD19 antigen present on human B cells.

Specificity: This antibody reacts with the B4 antigen present on the peripheral blood cells and lymphoid organs, on cell lines derived from normal and malignant B cells, and on tumor cells isolated from patients with B cell-derived neoplasms

Application Notes: This antibody is recommended to be used for the cell surface expression of the B4 antigen. It is reported that in mitogen stimulated B cells the expression of the B4 antigen increases initially with the B cell activation and then is lost with the B cell differentiation (PMID: 6408173). Conjugate of DC1 with murine and humanized versions of anti-B4 antibody was found to be potent and effective in selective killing of target cells in culture. It is also reported that the anti-B4-DC1 conjugate showed antitumor efficacy in an aggressive metastatic human B-cell lymphoma survival model in SCID mice and completely cured animals bearing large tumors (PMID: 7545085). Anti-B4 when conjugated with blocked ricin increased the antibody induced cell calcium mobilization and CD19 internalization. Modulation of CD19 induced by anti-B4 or anti-B4-bR was evaluated by indirect immunofluorescence and flow cytometry (PMID: 9310487). Anti-B4-blocked ricin (anti-B4-bR) recognizes CD19-positive cells, which includes most B-cell non-Hodgkin's lymphomas (NHLs). Phase II clinical studies of anti-B4-bR suggested that it does not actively penetrate in certain sites of the disease and is not an active agent in relapsed NHLs (PMID: 9829722)

Antibody First Published in: Nadler et al. B4, a human B lymphocyte-associated antigen expressed on normal, mitogen-activated, and malignant B lymphocytes. J Immunol (1983);131(1):244-50. [PMID:6408173](#)

Note on publication: Describes the characterization of the B cell specific B4 antigen using this antibody.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic

procedures for humans or animals.