

Anti-HLA-DR10 [Lym-1] Bulk Size Ab03430-10.3-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 IgG2a format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: Lym-1

Alternative Name(s) of Target: CD74; Beta chain HLA-DR; HLA-DR β -chain; β -chain; HLA class II histocompatibility antigen gamma chain; HLA-DR antigens-associated invariant chain; Ia antigen-associated invariant chain; Ii; p33

UniProt Accession Number of Target Protein: P04233

Published Application(s): Immunoperoxidase staining, IP, RIA, WB, FC, IF, IHC

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing mice with tumor cell nuclei preparations as immunogens.

Specificity: This antibody has high affinity for a discontinuous epitope on the β subunit of the human HLA-DR10 surface membrane antigen of malignant B cells, which is not expressed on normal lymphocytes. HLA-DR10 (DR10) is a HLA-DR serotype that recognizes the DRB1*1001 gene product.

Application Notes: This antibody could recognize cell lines of B-cell lineage but not cells of T-cell, myeloid, or erythroid derivation in a live cell radioimmunoassay. Flow cytometric analysis of 22 lymphoma biopsies showed that the majority of B-cell tumors were LYM-1 positive. Approximately 40% of B-cell chronic lymphocytic leukemias were found to be positive with Lym-1. The binding of this antibody to peripheral blot lymphocytes was assessed using indirect immunofluorescence staining. Immunoperoxidase staining of nonlymphoid human organs and tissues revealed weak reactivity of Lym-1. This antibody was also capable of immunoprecipitating HLA-DR10 antigen from Raji cells and ARH-77 myeloma cells. (PMID: 3542194). This antibody also was used for immunohistochemical staining of advanced B-cell NHL tissues from patients (PMID: 10809213). This antibody can be used to identify the HLA-DR variant HLA-DR10 in a western blot (PMID: 8917632). LYM-1 chimeric antigen receptor T cells were demonstrated to exhibit potent anti-tumor effects against B-cell lymphoma (PMID: 29261129).

Antibody First Published in: Epstein et al. Two new monoclonal antibodies, Lym-1 and Lym-2, reactive with human B-lymphocytes and derived tumors, with immunodiagnostic and immunotherapeutic potential.

Cancer Res. 1987 Feb 1;47(3):830-40. [PMID:3542194](#)

Note on publication: Describes the immunodiagnostic and immunotherapeutic potential of two monoclonal antibodies reactive with tumor derived human B cell lymphocytes.

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.