

Anti-HLA-DR [L243] Bulk Size Ab03368-3.0-BT

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG2 format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Mouse IgG2b, Kappa

Clone Number: L243

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

UniProt Accession Number of Target Protein: P04233

Published Application(s): ICC, IP, WB, Block, FC, IF, IHC

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing mice with the human B cell line RPMI 8866.

Specificity: This antibody reacts with the HLA-DR antigen and does not cross react with HLA-DP or HLA-DQ. This antibody binds a conformational epitope on HLA-DRA which depends on the correct folding of the $\alpha\beta$ heterodimer. HLA-DR is an MHC class II cell surface receptor encoded by the human leukocyte antigen complex on chromosome 6 region 6p21.31. HLA-DR is also involved in several autoimmune conditions, disease susceptibility and disease resistance. The primary function of HLA-DR is to present peptide antigens, potentially foreign in origin, to the immune system for the purpose of eliciting or suppressing T-(helper)-cell responses that eventually lead to the production of antibodies against the same peptide antigen.

Application Notes: This antibody can be used for the immunoprecipitation of HLA-DR and MHC class-II peptides (PMID: 2961843; 11390619). L243 selectively inhibited the in vitro proliferation of Epstein-Barr virus-transformed lymphoblastoid cell lines (LCL) (PMID: 2467753). This antibody was used in a flow cytometric assay to detect the decrease in HLA-DR expression on monocytes which is an indicator of immunosuppression in patients with sepsis and is correlated with increased risk of secondary infection and mortality (PMID: 33432735). Alexa 568 and FITC labelled L243 antibody was used in the immunofluorescent staining of renal microvascular endothelial cells (RMEC) or human kidney tissue (PMID: 12707403). This antibody was also used in the detection of MHC class II protein in a western blot (PMID: 11390619). This antibody can also be used for the immunocytochemical and immunohistochemical analysis of frozen sections of necropsy brain tissue to identify HLA-DR expressing cells (PMID: 1864982).

Antibody First Published in: Lampson et al. Two populations of Ia-like molecules on a human B cell line. J

Immunol. 1980 Jul;125(1):293-9. [PMID:6966655](#)

Note on publication: Describes the generation of two antibodies against Ia-like molecules on the human B cell line Raji.

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.