PRODUCT INFORMATION

HLA-DR Monoclonal Antibody (Clone L243)

Item No. 21827

Overview and Properties

Contents:	This vial contains 100 µg of protein G-purified IgG.
Synonyms:	HLA Class II Histocompatibility Antigen DR, MHC Class II Antigen DR
Immunogen:	Human lymphoblastoid cell line (RPMI 8866)
Species Reactivity:	(+) Human, canine, and non-human primate HLA-DR
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, containing 50% glycerol, with 0.1% BSA, and 0.02% sodium azide
Clone:	L243
Host:	Mouse
Isotype:	IgG2a
Applications:	Flow cytometry (FC), Immunocytochemistry (ICC), Immunoflourescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP), and Western blot (WB); the recommended starting dilution for FC is 1:200. Suitable for ICC, IF, IHC, IP, and WB, working dilution should be determined empirically.

Image

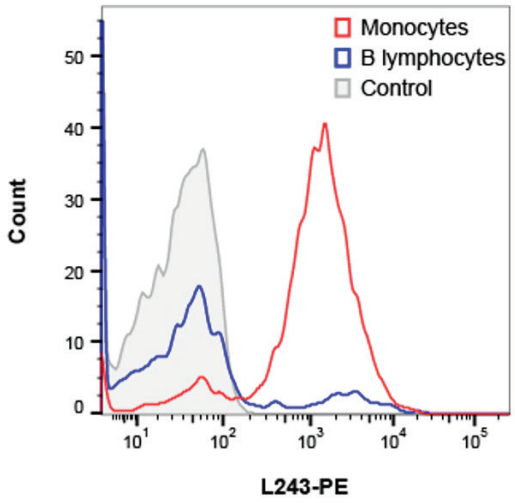

Figure 1: Flow cytometry data using PE conjugated HLA-DR Monoclonal Antibody (Clone L243). Highest levels detected in antigen presenting cell types.

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Description

HLA-DR is a MHC Class II cell surface receptor heterodimer composed of a 33-35 kDa α chain, a ~30 kDa β chain, and a 10-30 amino acid ligand.[1] When the heterodimer is fully combined on the cell surface of an antigen-presenting cell, such as macrophages, B cells, and dendritic cells, they present that ligand primarily to CD-4$^+$ T cells.[2] This presentation coupled with the T cell response can stimulate or suppress an antibody response to that ligand.[2] HLR-DRs have been linked to a number of autoimmune disorders such as rheumatoid arthritis, lupus, and psoriasis as well as diabetes, hepatitis, and sclerosis among a number of others.[3-9] Cayman's HLA-DR Monoclonal Antibody (Clone L243) detects HLA-DR with or without attached ligand. The predicated size of the HLA-DRα or HLA-DRβ subunits is ~29-30 kDa.

References

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