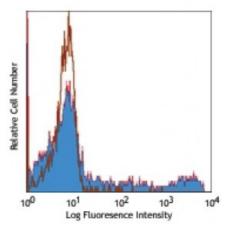
Product Data Sheet

Biotin anti-human HLA-DR

Catalog # / Size:	2138070 / 100 μg
Clone:	L243
Isotype:	Mouse lgG2a, к
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



Human peripheral blood lymphocytes stained with biotinylated L243, followed by Sav-PE

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.03 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes:	The L243 monoclonal antibody reacts with the HLA-DR antigen, a member of MHC class II molecules. It does not cross react with HLA-DP and HLA-DQ. Clone L243 binds a conformational epitope on HLA-DR α which depends on the correct folding of the $\alpha\beta$ heterodimer. ¹⁹
	Additional reported applications (for the relevant formats) include: immunoprecipitation ⁸ , Western blotting ⁸ , <i>in vitro</i> blocking of mixed lymphocyte reactions ^{9,10} , depeletion of MHC class II cells ⁷ , and immunohistochemical staining of acetone-fixed frozen sections ^{4,5} . The LEAF ^{m} purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 307612). For highly sensitive assays, we recommend Ultra-LEAF ^{m} purified antibody (Cat. No. 307648) with a lower endotoxin limit than standard LEAF ^{m} purified antibodies (Endotoxin <0.01 EU/microg).
Application References:	 Brodsky F. 1984. <i>Immunogenetics</i> 19:179. Robbins P, <i>et al.</i> 1987. <i>Human Immunol.</i> 18:301. Stites D, <i>et al.</i> 1986. <i>Clin. Immunol. Immunopathol.</i> 38:161. Warnke R, <i>et al.</i> 1980. <i>J. Histochem. Cytochem.</i> 28:771. (IHC) Engleman E, <i>et al.</i> 1981. <i>P. Natl. Acad. Sci. USA</i> 78:1791. (IHC) Zipf T, <i>et al.</i> 1981. <i>Cancer Res.</i> 41:4786. Goodier M, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:139. (Depletion) Esser M, <i>et al.</i> 2001. <i>J. Virol.</i> 75:6173. (IP, WB) Kalka-Moll WM, <i>et al.</i> 2002. <i>J. Immunol.</i> 169:6149. (Block) Wang RF, <i>et al.</i> 1999. <i>Science</i> 284:1351. (Block) Zaba LC, <i>et al.</i> 2007. <i>J. Exp. Med.</i> 204:3183. <u>PubMed</u> Fujita H, <i>et al.</i> 2009. <i>P. Natl. Acad. Sci. USA</i> 106:21795. <u>PubMed</u>

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	 Charles N, <i>et al.</i> 2010. <i>Nat. Med.</i> 16:701. (FC) <u>PubMed</u> Goncalves RM, <i>et al.</i> 2010. <i>Infect. Immun.</i> 78:4763. <u>PubMed</u> Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) Kim WK, <i>et al.</i> 2006. <i>Am. J. Pathol.</i> 168:822. (FC) Stein R, <i>et al.</i> 2011. <i>Leuk. Lymphoma</i> 52:273. Galkowska H, <i>et al.</i> 1996. <i>Vet. Immunol. Immunopathol.</i> 53:329. Moro M, <i>et al.</i> 2005. <i>BMC Immunol.</i> 6:24. Lauterbach N, <i>et al.</i> 2014. <i>Mol Immunol.</i> 59:19. <u>PubMed</u>
Description:	HLA-DR is a heterodimeric cell surface glycoprotein comprised of a 36 kD α

Description:	HLA-DR is a heterodimeric cell surface glycoprotein comprised of a 36 kD α (heavy) chain and a 27 kD β (light) chain. It is expressed on B cells, activated T cells, monocytes/macrophages, dendritic cells, and other non-professional APCs. In conjunction with the CD3/TCR complex and CD4 molecules, HLA-DR is critical for efficient peptide presentation to CD4 ⁺ T cells.
Antigen	1. Levacher M, <i>et al.</i> 1990. <i>Clin. Exp. Immunol.</i> 81:177.

- Levacher M, et al. 1990. Chin. Exp. Initiation. 81:177.
 Terstappen L, et al. 1990. J. Leukocyte Biol. 48:138.
 Edwards JA, et al. 1986. J. Immunol. 137:490.
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