APC/Cy7 anti-human HLA-DR

Catalog # / Size: 2138085 / 25 tests

2138090 / 100 tests

Clone: L243

Isotype: Mouse IgG2a, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7

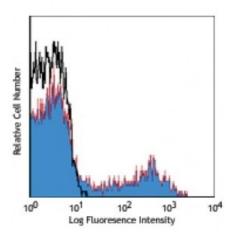
and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with L243 APC/Cv7

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. 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: immunoprecipitation⁸, Western blotting⁸, *in vitro* blocking of mixed lymphocyte reactions^{9,10}, depeletion of MHC class II cells⁷, and immunohistochemical staining of acetone-fixed frozen sections^{4,5}. The LEAF 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 purified antibody (Cat. No. 307648) with a lower endotoxin limit than standard LEAF purified antibodies (Endotoxin <0.01 EU/microg).

Application References:

- 1. Brodsky F. 1984. Immunogenetics 19:179.
- 2. Robbins P, et al. 1987. Human Immunol. 18:301.
- 3. Stites D, et al. 1986. Clin. Immunol. Immunopathol. 38:161.
- 4. Warnke R, et al. 1980. J. Histochem. Cytochem. 28:771. (IHC)
- 5. Engleman E, et al. 1981. P. Natl. Acad. Sci. USA 78:1791. (IHC)
- 6. Zipf T, et al. 1981. Cancer Res. 41:4786.
- 7. Goodier M, et al. 2000. J. Immunol. 165:139. (Depletion)
- 8. Esser M, et al. 2001. J. Virol. 75:6173. (IP, WB)
- 9. Kalka-Moll WM, et al. 2002. J. Immunol. 169:6149. (Block)
- 10. Wang RF, et al. 1999. Science 284:1351. (Block)
- 11. Zaba LC, et al. 2007. J. Exp. Med. 204:3183. PubMed
- 12. Fujita H, et al. 2009. P. Natl. Acad. Sci. USA 106:21795. PubMed

- 13. Charles N, et al. 2010. Nat. Med. 16:701. (FC) PubMed
- 14. Goncalves RM, et al. 2010. Infect. Immun. 78:4763. PubMed
- 15. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)
- 16. Kim WK, et al. 2006. Am. J. Pathol. 168:822. (FC)
- 17. Stein R, et al. 2011. Leuk. Lymphoma 52:273.
- 18. Galkowska H, et al. 1996. Vet. Immunol. Immunopathol. 53:329.
- 19. Moro M, et al. 2005. BMC Immunol. 6:24.
- 20. Lauterbach N, et al. 2014. Mol Immunol. 59:19. PubMed

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 References:

- 1. Levacher M, et al. 1990. Clin. Exp. Immunol. 81:177.
- 2. Terstappen L, et al. 1990. J. Leukocyte Biol. 48:138.
- 3. Edwards JA, et al. 1986. J. Immunol. 137:490.
- 4. van Es A, *e*