

Product Data Sheet

Purified anti-human HLA-DR

Catalog # / Size: 307602 / 100 µg

Clone: L243

Isotype: Mouse IgG2a, κ

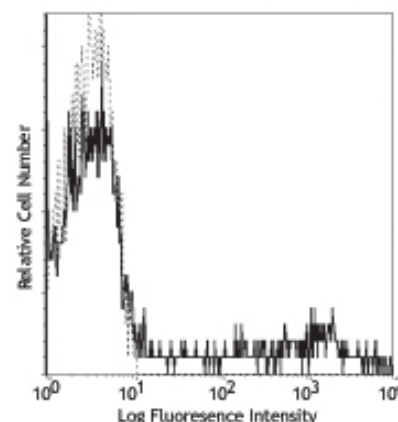
Reactivity: Human, **Cross-Reactivity:** African Green, Baboon, Chimpanzee, Common Marmoset, Cotton-topped Tamarin, Cynomolgus, Pigtailed Macaque, Rhesus, Squirrel Monkey, Dog (Canine)^{17, 18}

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.



Human peripheral blood lymphocytes stained with L243 PE

Applications:

Applications: FC - Quality tested
 IP, WB, IHC - Reported in the literature
 CyTOF® - Validated

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per 10⁶ cells in 100 µl volume or 100 µl 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. Additional reported applications (for the relevant formats) include: immunoprecipitation⁸, Western blotting⁸, *in vitro* blocking of mixed lymphocyte reactions^{7,9,10}, 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/µg).

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. Warneke 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. (Block)
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.

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, et al. 1984. *Transplantation* 37:65.
5. O'Doherty U, et al. 1994. *Immunology* 82:487.
6. Thomas R, et al. 1994. *J. Immunol.* 153:4016.
7. Grouard G, et al. 1996. *Nature* 384:364.

Related Products:Product

Clone

Application



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APC Goat anti-mouse IgG (minimal x-reactivity)
Biotin Goat anti-mouse IgG (minimal x-reactivity)
Purified Mouse IgG2a, κ Isotype Ctrl
PE Goat anti-mouse IgG (minimal x-reactivity)
Cell Staining Buffer
RBC Lysis Buffer (10X)

Poly4053
Poly4053
MOPC-173
Poly4053

FC
FC, ELISA, IHC, IF, WB
FC, ICC, IF, IHC, IP, WB
FC
FC, ICC, ICFC
FC, ICFC



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