

Product Data Sheet

FITC anti-human HLA-DR

Catalog # / Size: 307603 / 25 tests
307604 / 100 tests
307632 / 100 µg

Clone: L243

Isotype: Mouse IgG2a, κ

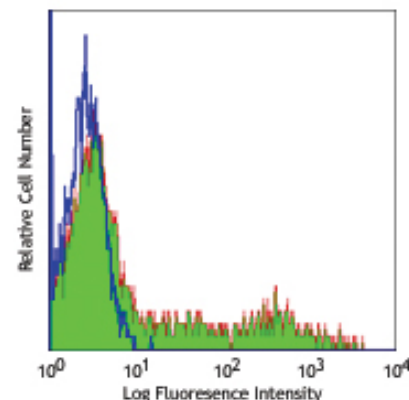
Reactivity: Human, **Cross-Reactivity:** African Green, Baboon, Chimpanzee, Common Marmoset, Cotton-topped Tamarin, Cynomolgus, Pigtailed Macaque, Rhesus, Squirrel Monkey, Dog (Canine)^{17, 18}

Preparation: The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: test size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
µg size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: test sizes: lot-specific; µg size: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with L243 FITC

Applications:

Applications: FC - Quality tested

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 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

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. Warne 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.



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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
	FITC Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	FITC anti-human HLA-A,B,C	W6/32	FC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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