PerCP/Fire™ 806 anti-human HLA-DR Antibody

Catalog# / Size	307695 / 25 tests 307696 / 100 tests
Clone	L243
Regulatory Status	RUO
Other Names	Major Histocompatibility Class II, MHC class II
Isotype	Mouse IgG2a, κ
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.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Chimpanzee, Dog, Common Marmoset, Squirrel Monkey, Cotton-topped Tamarin
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PerCP/Fire™ 806 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	FC - Quality tested
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 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Fire™ 806 has a maximum excitation of 478 nm and a maximum emission of 806 nm.
Excitation Laser	Blue Laser (488 nm)
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-DRa which depends on the correct folding of the aß heterodimer.[19] Additional reported applications (for the relevant formats) include: immunoprecipitation[8], Western blotting[8], *in vitro* blocking of mixed lymphocyte reactions[9,10], depeletion of MHC class II cells[7], immunohistochemical staining of acetone-fixed frozen sections[4,5], and spatial biology (IBEX)[21,22]. For sensitive functional assays, we recommend using the Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 307648, 307665 - 307669).

Application References **(PubMed link indicates BioLegend citation)**	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 See More
RRID	AB_3675035 (BioLegend Cat. No. 307695) AB_3675035 (BioLegend Cat. No. 307696)

Antigen Details

Structure	Ig superfamily, MHC class II, heterodimeric transmembrane protein, 36 kD heavy and 27 kD light chain
Distribution	B cells, activated T cells, monocytes/macrophages, dendritic cells, other APCs
Function	Peptide presentation
Ligand/Receptor	CD3/TCR, CD4
Cell Type	Antigen-presenting cells, B cells, Dendritic cells, Macrophages, Monocytes, T cells, Tregs
Biology Area	Immunology, Innate Immunity
Molecular Family	MHC Antigens
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.
Gene ID	3122 3123

Related Protocols

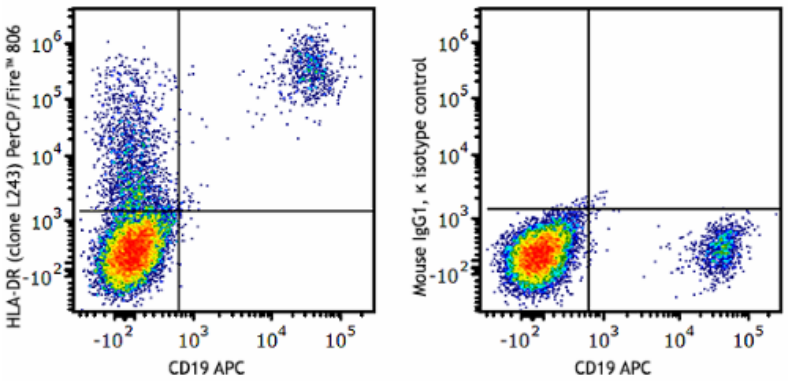
- Cell Surface Flow Cytometry Staining Protocol

Other Formats

APC anti-human HLA-DR, FITC anti-human HLA-DR, PE anti-human HLA-DR, PE/Cyanine5 anti-human HLA-DR, Purified anti-human HLA-DR, Biotin anti-human HLA-DR, PE/Cyanine7 anti-human HLA-DR, APC/Cyanine7 anti-human HLA-DR, Alexa Fluor® 488 anti-human HLA-DR, Alexa Fluor® 647 anti-human HLA-DR, Pacific Blue™ anti-human HLA-DR, Alexa Fluor® 700 anti-human HLA-DR, PerCP anti-human HLA-DR, PerCP/Cyanine5.5 anti-human HLA-DR, Brilliant Violet 605™ anti-human HLA-DR, Brilliant Violet 421™ anti-human HLA-DR, Brilliant Violet 570™ anti-human HLA-DR, Brilliant Violet 711™ anti-human HLA-DR, Brilliant Violet 785™ anti-human HLA-DR, Brilliant Violet 510™ anti-human HLA-DR, Ultra-LEAF™ Purified anti-human HLA-DR, Brilliant Violet 650™ anti-human HLA-DR, Purified anti-human HLA-DR (Maxpar® Ready), PE/Dazzle™ 594 anti-human HLA-DR, APC/Fire™ 750 anti-human HLA-DR, TotalSeq™-A0159 anti-human HLA-DR, TotalSeq™-B0159 anti-human HLA-DR, TotalSeq™-C0159 anti-human HLA-DR, Brilliant Violet 750™ anti-human HLA-DR, APC/Fire™ 810 anti-human HLA-DR, PE/Fire™ 640 anti-human HLA-DR, Spark Violet™ 538 anti-human HLA-DR Antibody, KIRAVIA Blue 520™ anti-human HLA-DR, TotalSeq™-D0159 anti-human HLA-DR, PE/Fire™ 810 anti-human HLA-DR, GMP PE/Dazzle™ 594 anti-human HLA-DR, Spark Violet™ 423 anti-human HLA-DR, GMP FITC anti-human HLA-DR, GMP APC anti-human HLA-DR, GMP PE/Cyanine7 anti-human HLA-DR, GMP Pacific Blue™ anti-human HLA-DR, GMP APC/Fire™ 750 anti-human HLA-DR, Spark Violet™ 500 anti-human HLA-DR, GMP PerCP/Cyanine5.5 anti-human HLA-DR, GMP PE anti-human HLA-DR, Spark UV™ 387 anti-human HLA-DR, Spark Blue™ 515

anti-human HLA-DR, Spark NIR™ 685 anti-human HLA-DR, PerCP/Fire™ 806 anti-human HLA-DR, PE/Fire™ 700 anti-human HLA-DR, Spark Blue™ 550 anti-human HLA-DR (Flexi-Fluor™), Spark Red™ 718 anti-human HLA-DR (Flexi-Fluor™), PE/Fire™ 744 anti-human HLA-DR, Spark PLUS UV395™ anti-human HLA-DR, GMP PerCP anti-human HLA-DR, Spark YG™ 581 anti-human HLA-DR (Flexi-Fluor™)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD19 (clone HIB19) APC and anti-human HLA-DR (clone L243) PerCP/Fire™ 806 (left) or mouse IgG1, κ PerCP/Fire™ 806 isotype control (right).

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