

# HLA-DR Monoclonal Antibody (L243), PerCP-eFluor 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Dog, Cynomolgus Monkey, Human, Non-human primate, Rhesus monkey
Published Species	Artificial Control
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	L243
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10671401

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	4 Publications

## Product Specific Information

Description: The L243 mAb reacts with the human major histocompatibility complex (MHC) class II, HLA-DR. HLA-DR is expressed on the surface of human antigen presenting cells (APC) including B cells, monocytes, macrophages, DCs, and activated T cells. HLA-DR is a heterodimeric transmembrane protein composed of alpha and beta subunits and plays an important role in the presentation of peptides to CD4<sup>+</sup> T lymphocytes. The L243 antibody recognizes a different epitope than the LN3 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes.

Applications Tested: This L243 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

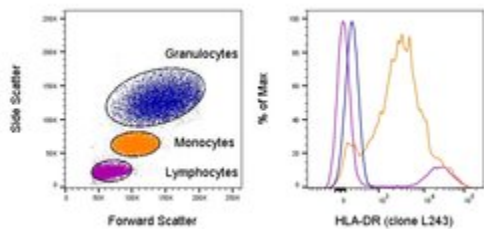
PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

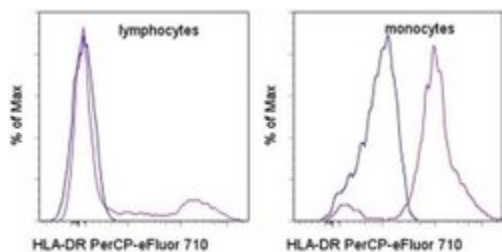
## Advanced Verification Data



### HLA-DR Antibody (46-9952-42)

Staining of human peripheral blood cells. As expected based on known relative expression patterns, HLA-DR clone L243 stains monocytes and a subset of lymphocytes (B cells) but does not stain granulocytes. Details: Normal human whole blood was surface stained with HLA-DR (clone L243). After staining, red blood cells were lysed using 1-step Fix/Lyse Buffer. Cells in the lymphocyte (purple histogram), monocyte (orange histogram), or granulocyte (blue histogram) gates were used for analysis. Relative expression validation info.

## Product Images For HLA-DR Monoclonal Antibody (L243), PerCP-eFluor 710, eBioscience™



### HLA-DR Antibody (46-9952-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG2a kappa Isotype Control PerCP-eFluor® 710 (Product # 46-4724-82) (blue histogram) or Anti-Human HLA-DR PerCP-eFluor® 710 (purple histogram). Cells in the lymphocyte (left) or monocyte (right) gate were used for analysis.

View more figures on [thermofisher.com](http://thermofisher.com)

## Flow Cytometry (4)

Stem cell research and therapy

### Human umbilical cord mesenchymal stem cells improve the reserve function of perimenopausal ovary via a paracrine mechanism.

"Published figure using HLA-DR monoclonal antibody (Product # 46-9952-42) in Flow Cytometry"

Authors: Li J, Mao Q, He J, She H, Zhang Z, Yin C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

Proceedings of the National Academy of Sciences of the United States of America

### Remarkably low affinity of CD4/peptide-major histocompatibility complex class II protein interactions.

"Published figure using HLA-DR monoclonal antibody (Product # 46-9952-42) in Flow Cytometry"

Authors: Jönsson P, Southcombe JH, Santos AM, Huo J, Fernandes RA, McColl J, Lever M, Evans EJ, Hudson A, Chang VT, Hanke T, Godkin A, Dunne PD, Horrocks MH, Palayret M, Screation GR, Petersen J, Rossjohn J, Fugger L, Dushek O, Xu XN, Davis SJ, Klenerman D

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

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