

# HLA-DR Monoclonal Antibody (LN3), APC-eFluor™ 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	LN3
Conjugate	APC-eFluor™ 780
Excitation/Emission Max	756/785 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1963603

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	34 Publications

## Product Specific Information

**Description:** The LN3 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.

**Applications Reported:** This LN3 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This LN3 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.03 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.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

**Light sensitivity:** This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

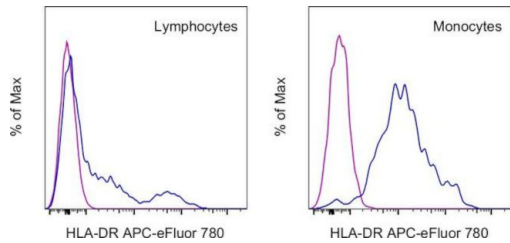
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency

/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

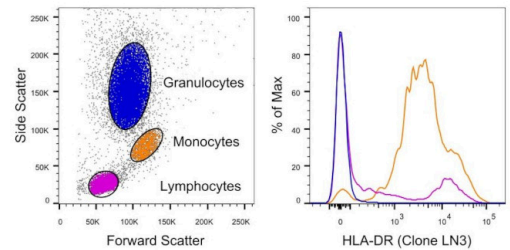
Excitation: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For HLA-DR Monoclonal Antibody (LN3), APC-eFluor™ 780, eBioscience™**



**HLA-DR Antibody (47-9956-42) in Flow**  
Normal human peripheral blood cells were stained with Mouse IgG2b kappa Isotype Control, APC-eFluor 780 (Product # 47-4732-80) (blue histogram) or HLA-DR Monoclonal Antibody, APC-eFluor 780 (purple histogram). Cells in the lymphocyte gate (left) or monocyte gate (right) were used for analysis.



**HLA-DR Antibody (47-9956-42)**  
Staining of human peripheral blood cells. As expected based on known relative expression patterns, HLA-DR clone LN3 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 LN3). 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 of HLA-DR staining. {RE}

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Flow Cytometry (34)

iScience	Year 2023
<b>Single-cell RNA-seq analysis reveals dual sensing of HIV-1 in blood Axl<sup>+</sup> dendritic cells.</b>	Species Human
<p>"47-9956-42 was used in flow cytometry to demonstrate that HIV-1 induced two main broad and intense transcriptional programs in different Axl+DCs potentially induced by different sensors; an NF-B-mediated program that led to DC maturation and efficient CD4+ T cell activation, and a program mediated by STAT1/2 that activated type I IFN and ISG responses."</p> <p>Authors: Brouiller F,Nadalin F,Bonté PE,Ait-Mohamed O,Delaugerre C,Lelièvre JD,Ginhoux F,Ruffin N,Benaroch P</p>	
Journal for immunotherapy of cancer	Year 2022
<b>PD-L1 blockade restores CAR T cell activity through IFN--regulation of CD163+ M2 macrophages.</b>	Species Human
<p>"47-9956-42 was used in Flow cytometry/Cell sorting to reveal an alternative mechanism by which the combination of CAR T cells and immune checkpoint blockade modulates the immune landscape of solid tumors to enhance therapeutic efficacy of CAR T cells."</p> <p>Authors: Yamaguchi Y,Gibson J,Ou K,Lopez LS,Ng RH,Leggett N,Jonsson VD,Zarif JC,Lee PP,Wang X,Martinez C,Dorff TB,Forman SJ,Priceman SJ</p>	

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