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
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_1963603

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	25 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^+ 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 10^5 to 10^8 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 fluorochome.

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

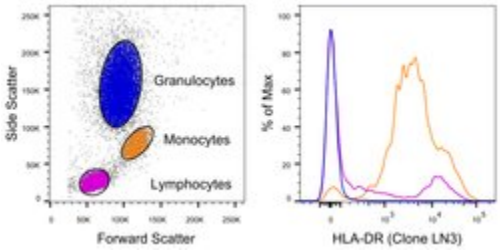
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix

/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.

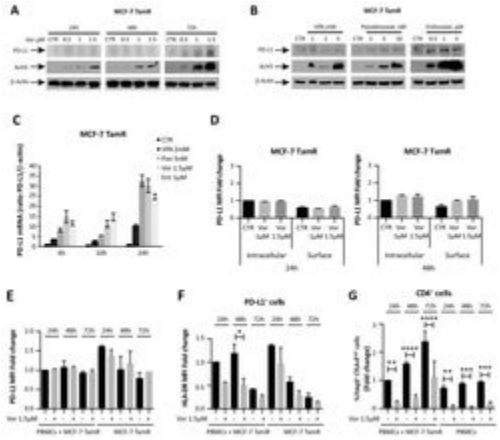
Excitation: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

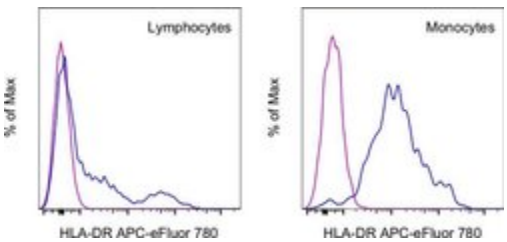


HLA-DR Antibody (47-9956-42)
Staining of human peripheral blood cells. As expected based on known relative expression patterns, HLA-DR clone LN3 stains monocytes and a subset of lymphocytes (B cells) but does not stain granulocytes. Details: Normal human whole blood was surface stained with HLA-DR (clone 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. Relative expression validation info.



HLA-DR Antibody (47-9956-42)
Figure 4 HDACi effect on tamoxifen-resistant MCF-7 breast cancer cells (A) MCF-7 TamR cells were untreated or treated with increasing doses of vorinostat; PD-L1 and acetyl-H3 protein expression was evaluated at 24, 48 and 72 hours after treatment by western blot analysis. (B) PD-L1 protein expression was evaluated by western blot in MCF-7 TamR cells exposed to VPA, panobinostat and entinostat for 48 hours. (C) PD-L1 mRNA expression was quantified by qReal-Time PCR in MCF-7 TamR cells after treatment with different HDACi. beta-actin was used as protein loading control in western blot and housekeeping control gene to normalize qReal-Time PCR reactions. (D) MCF-7 TamR cells, untreated or treated with increasing doses of vorinostat for 24 and 48 hours, were collected for flow cytometry analysis, as described in the Material and Methods, to distinguish between surface and intracellular PD-L1 expression. Flow cytometric quantification of PD-L1 MFI for live tumor cells (expressed as fold change relative to the control) is shown. Flow cytometric quantification of PD-L1 (E) and HLA-DR (F) expression in MCF-7 TamR cells alone or co-cultured with PBMCs and evaluated at 24, 48 and 72 hours after treatment with vorinostat (1.5muM). (G) Flow cytometric quantification of CD4 + Foxp3 + CTLA-4 high T cells in PBMCs of healthy donors alone or in presence of MCF-7 TamR cells after 24, 48 and 72 hours of vorinostat treatment. Statistical significance is indicated by p-values as * P <= 0.05; ** P Cell treatment validation info.

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.

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25 References

Flow Cytometry (25)

Oncoimmunology

Azacytidine prevents experimental xenogeneic graft-versus-host disease without abrogating graft-versus-leukemia effects.

"47-9956 was used in Flow cytometry/Cell sorting to investigate the impact of 5-azacytidine on xenogeneic graft-vs.-host disease and graft-vs.-leukaemia effects in a humanised murine model of transplantation."

Authors: Ehx G,Fransolet G,de Leval L,D'Hondt S,Lucas S,Hannon M,Delens L,Dubois S,Drion P,Beguin Y,Humblet-Baron S,Baron F

Species
Human

Dilution
Not Cited

Year
2021

Journal of translational medicine

Connecting METTL3 and intratumoural CD33^{+} MDSCs in predicting clinical outcome in cervical cancer.

"Published figure using HLA-DR monoclonal antibody (Product # 47-9956-42) in Flow Cytometry"

Authors: Ni HH,Zhang L,Huang H,Dai SQ,Li J

Species
Not Applicable

Dilution
Not Cited

Year
2020

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