

CD45RA Monoclonal Antibody (HI100), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	HI100
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467272

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	5 µg/mL	-
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	24 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

Description: The HI100 monoclonal antibody reacts with human CD45RA, a 220 kDa molecule expressed by subpopulations of CD4+ peripheral T lymphocytes, CD8+ peripheral T lymphocytes, and B cells. The CD45RA+ T cell populations are mainly naive/virgin allowing the use of HI100 mAb as a phenotypic marker to discriminate T cell subsets.

Applications Reported: The HI100 antibody has been reported for use in flow cytometric analysis, and immunohistochemical staining.

Applications Tested: The HI100 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.5 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

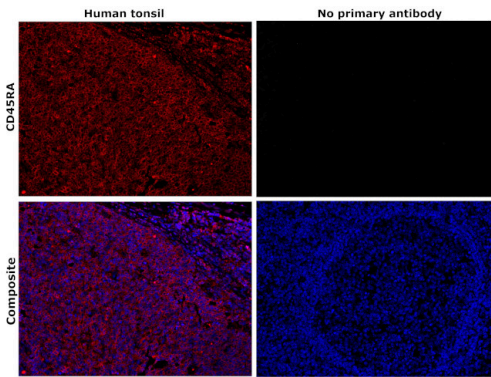
Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

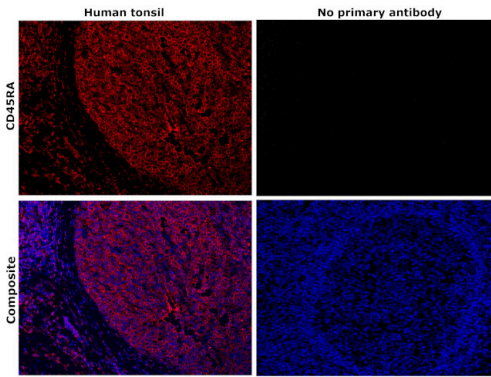
CD45RA Antibody (14-0458-82) in IHC (P)

Immunohistochemical analysis of CD45RA was performed using formalin-fixed paraffin-embedded human tonsil tissue sections. To expose the target protein, heat-induced epitope retrieval was performed on de-paraffinized sections using eBioscience™ IHC Antigen Retrieval Solution - High pH (10X) (Product # 00-4956-58) diluted to 1X solution in water in a decloaking chamber at 110 degree Celsius for 15 minutes. Following antigen retrieval, the sections were blocked with 2% normal goat serum in 1X PBS for 45 minutes at room temperature and then probed with or without CD45RA Monoclonal Antibody (HI100), eBioscience™ (Product # 14-0458-82) at a concentration of 5 µg/mL in 0.1% normal goat serum overnight at 4 degree Celsius in a humidified chamber. Detection was performed using Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ Plus 647 (Product # A32728) at a dilution of 1:2000 in 0.1% normal goat serum for 45 minutes at room temperature. ReadyProbes™ Tissue Autofluorescence Quenching Kit (Product # R37630) was used to quench autofluorescence from the tissues. Nuclei were stained with DAPI (Product # D1306) and the sections were mounted using ProLong™ Glass Antifade Mountant (Product # P36984). The images were captured on EVOS™ M7000 Imaging System (Product # AMF7000) at 20X magnification and externally deconvoluted.



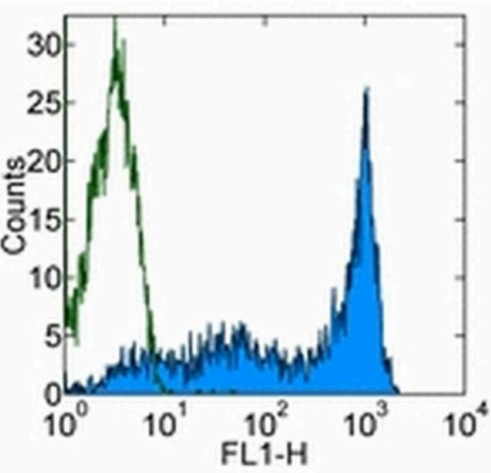
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CD45RA Antibody (14-0458-82) in Flow

Staining of normal human peripheral blood cells with 0.25 µg of Mouse IgG2b Isotype Control Purified (Product # 14-4732-82) (open histogram) or 0.25 µg of Anti-Human CD45RA Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Cells in the lymphocyte gate were used for analysis.



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Immunocytochemistry (1)

Journal of immunology (Baltimore, Md. : 1950)

Microbe-specific unconventional T cells induce human neutrophil differentiation into antigen cross-presenting cells.

"14-0458 was used in Immunofluorescence to investigate how unconventional T cells represent key controllers of neutrophil-driven innate and adaptive responses to a broad range of pathogens."

Authors: Davey MS,Morgan MP,Liuzzi AR,Tyler CJ,Khan MWA,Szakmany T,Hall JE,Moser B,Eberl M

Year
2014

Species
Human

Flow Cytometry (24)

Oncoimmunology

TIGIT expressing CD4+T cells represent a tumor-supportive T cell subset in chronic lymphocytic leukemia.

"Published figure using CD45RA monoclonal antibody (Product # 14-0458-82) in Flow Cytometry"

Authors: Catakovic K,Gassner FJ,Ratswohl C,Zaborsky N,Rebhandl S,Schubert M,Steiner M,Gutjahr JC,Pleyer L,Egle A,Hartmann TN,Greil R,Geisberger R

Year
2022

Frontiers in immunology

Differences in Maturation Status and Immune Phenotypes of Circulating Helios⁺ and Helios⁻ Tregs and Their Disrupted Correlations With Monocyte Subsets in Autoantibody-Positive T1D Individuals.

"Published figure using CD45RA monoclonal antibody (Product # 14-0458-82) in Flow Cytometry"

Authors: Zhang Y,Zhang J,Shi Y,Shen M,Lv H,Chen S,Feng Y,Chen H,Xu X,Yang T,Xu K

Year
2021

Species
Human

[View more Flow references on thermofisher.com](#)

Miscellaneous PubMed (1)

Molecular immunology

TCR-induced downregulation of protein tyrosine phosphatase PEST augments secondary T cell responses.

"14-0458 was used in Magnetic cell separation to investigate how PTP-PEST is down-regulated following T cell activation, and how that can lead to reduced IL-2 secretion following TCR and CD28 stimulation."

Authors: Arimura Y,Vang T,Tautz L,Williams S,Mustelin T

Year
2008

Species
Human

More applications with references on thermofisher.com

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