

# Product Datasheet

## CD45RA Antibody (158-4D3)

### NBP2-15193-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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**NBP2-15193-0.1mg**

CD45RA Antibody (158-4D3)

<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	0.2 mg/ml
<b>Storage</b>	Store at 4C.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	158-4D3
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG2a Kappa
<b>Purity</b>	Protein A or G purified
<b>Buffer</b>	10 mM PBS with 0.05% BSA
<b>Product Description</b>	
<b>Description</b>	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP2-33144)  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
<b>Host</b>	Mouse
<b>Gene ID</b>	5788
<b>Gene Symbol</b>	PTPRC
<b>Species</b>	Human
<b>Marker</b>	Leucocyte Marker
<b>Specificity/Sensitivity</b>	Recognizes a protein of 205kDa-220kDa, identified as CD45RA [Workshop V; Code CD45.38]. CD45RA is isoforms of the human leukocyte common antigen (CD45). Human CD45 contains three exons which encode peptide segments designated A, B and C, respectively. The differential splicing of the exons generates at least five isoforms, ABC, AB, BC, B and O. This antibody reacts with ABC and BC isoforms. CD45RA is expressed on 40-50% of peripheral CD4+ T-cells, 50% of peripheral CD8+ T-cells, B-cells, and leukemic B-cell lines. T-cells expressing CD45RA are naive or virgin T-cells. T-cells expressing CD45RO are memory T-cells. CD45RA and CD45RO define complementary, predominantly non-overlapping populations of resting peripheral T-cells. This monoclonal antibody is useful in study on the subpopulation of CD4+ or CD8+ T-cells. It can especially be used to differentiate T-cell lymphomas (CD45RO +ve) from B cell lymphomas (CD45RA +ve).
<b>Immunogen</b>	Stimulated human leukocytes
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
<b>Recommended Dilutions</b>	Western Blot 1-2 ug/ml, Flow Cytometry 0.5-1 ug/million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml

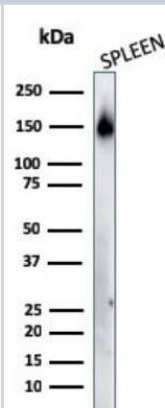


**Application Notes**

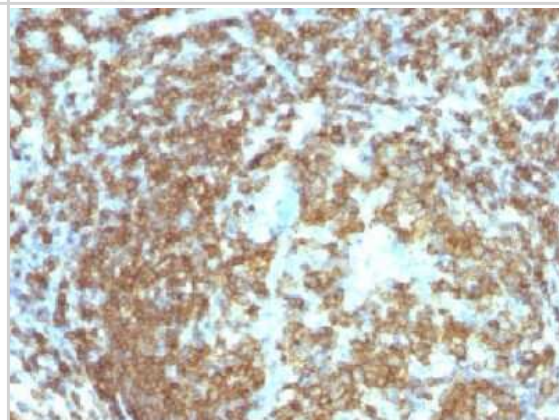
Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. The Workshop V code for clone 158-4D3 is CD45.38.

**Images**

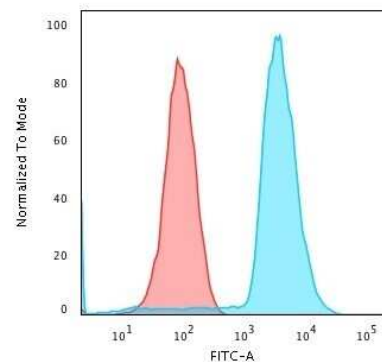
Western Blot: CD45RA Antibody (158-4D3) [NBP2-15193] - Western Blot Analysis of human spleen tissue lysates using CD45RA Antibody (158-4D3).



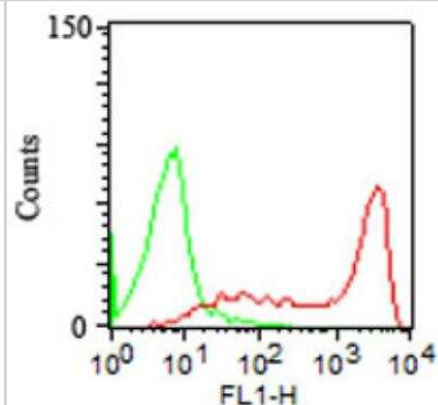
Immunohistochemistry-Paraffin: CD45RA Antibody (158-4D3) [NBP2-15193] - Formalin-fixed, paraffin-embedded human Tonsil stained with CD45RA Monoclonal Antibody (158-4D3).



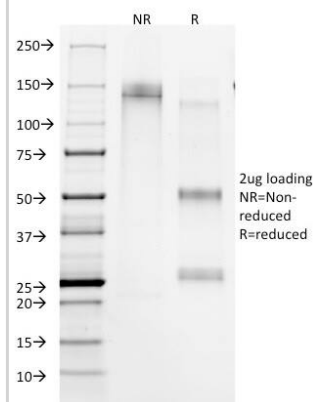
Flow Cytometry: CD45RA Antibody (158-4D3) [NBP2-15193] - Flow Cytometric Analysis of Jurkat cells. CD45RA Antibody (158-4D3) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Flow Cytometry: CD45RA Antibody (158-4D3) [NBP2-15193] - Surface staining of  $10^6$  PBMC using 1 ug of CD45RA antibody (red), anti mouse IgG FITC secondary and mouse IgG2a isotype control (green).



Immunofluorescent staining of paraformaldehyde-fixed Jurkat cells CD45RA Antibody (158-4D3) followed by goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Redot.



## Publications

Jiang S, Ding X, Wu Q et al. Identifying immune cells-related phenotype to predict immunotherapy and clinical outcome in gastric cancer *Frontiers in immunology* 2022-08-11 [PMID: 36032097] (IHC-P, Human)

Details:

Lot 5788-2P200827

Perugino CA, Kaneko N, Maehara T et al. CD4+ and CD8+ cytotoxic T lymphocytes may induce mesenchymal cell apoptosis in IgG4-related disease *J. Allergy Clin. Immunol.* 2020-05-30 [PMID: 32485263]

Mahalingam M, Pozniak A, McManus TJ et al. Abnormalities of CD45 isoform expression in HIV infection. *Clin Immunol Immunopathol.* 1996-11-01 [PMID: 8906753]



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### **Products Related to NBP2-15193-0.1mg**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
210-TA-005	TNF-alpha [Unconjugated]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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