

# CD45R (B220) Monoclonal Antibody (RA3-6B2), PE-Cyanine5, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Fish, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RA3-6B2
Conjugate	PE-Cyanine5
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_468755

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	86 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The RA3-6B2 monoclonal antibody reacts with exon A-restricted isoform of mouse CD45, a 220 kDa surface molecule. CD45R/B220 epitope is mainly expressed by the B cell lineage from early Pro-B to mature B cells. However, some activated T cells, lymphokine activated killer cells (LAK), NK cell progenitors in the bone marrow, and T cells of the I<sup>lpr/lpr</sup> mutant mouse also express this antigen.

**Applications Reported:** The RA3-6B2 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The RA3-6B2 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

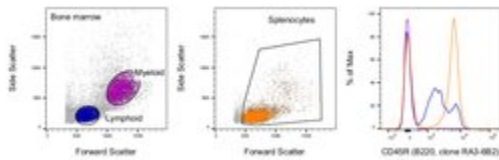
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ L 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: 488-561 nm; Emission: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2  $\mu$ m post-manufacturing filtered.

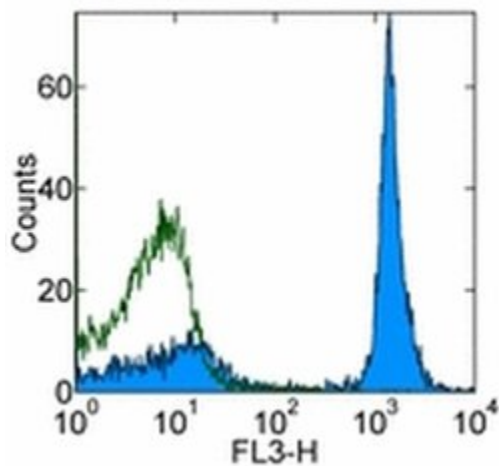
## Advanced Verification Data



### CD45R (B220) Antibody (15-0452-82)

Staining of mouse splenocytes and bone marrow cells. As expected based on known relative expression patterns, CD45R (B220) clone RA3-6B2 stains subsets in both the splenocytes gate and the bone marrow lymphoid gate but not the bone marrow myeloid gate. Details: Balb/c bone marrow cells (left) and splenocytes (middle) were surface stained with CD45R (B220, clone RA3-6B2) followed by staining with 7-AAD. Viable bone marrow cells in the lymphoid (blue histogram) and myeloid (purple histogram) gates and viable splenocytes (orange histogram) were used for analysis. Relative expression validation info.

## Product Images For CD45R (B220) Monoclonal Antibody (RA3-6B2), PE-Cyanine5, eBioscience™



### CD45R (B220) Antibody (15-0452-82) in Flow

Staining of BALB/c splenocytes with 0.06  $\mu$ g of Rat IgG2a K Isotype Control PE-Cyanine5 (Product # 15-4321-80) (blue histogram) or 0.06  $\mu$ g of Anti-Human/Mouse CD45R (B220) PE-Cyanine5 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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

## 90 References

### Western Blot (1)

Nature immunology

#### The miR-126-VEGFR2 axis controls the innate response to pathogen-associated nucleic acids.

"15-0452 was used in Western Blotting to identify the miR-126-VEGFR2 axis as an important regulator of the innate response that operates through multiscale control of pDCs."

Authors: Agudo J,Ruzo A,Tung N,Salmon H,Leboeuf M,Hashimoto D,Becker C,Garrett-Sinha LA,Baccarini A,Merad M,Brown BD

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2014

### Immunohistochemistry (Frozen) (1)

Journal of neuroimmunology

#### A role for brain-derived neurotrophic factor in B cell development.

Authors: Schuhmann B,Dietrich A,Sel S,Hahn C,Klingenspor M,Lommatzsch M,Gudermann T,Braun A,Renz H,Nockher WA

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2005

### Immunocytochemistry (1)

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

#### miR-150, a microRNA expressed in mature B and T cells, blocks early B cell development when expressed prematurely.

"15-0452 was used in Immunofluorescence to study how miR-150 can down-regulate mRNAs important for B cell function, and how it can block further B cell development when expressed prematurely."

Authors: Zhou B,Wang S,Mayr C,Bartel DP,Lodish HF

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2007

### Flow Cytometry (86)

Frontiers in immunology

#### Myeloid Cell CK2 Regulates Inflammation and Resistance to Bacterial Infection.

"Published figure using CD45R (B220) monoclonal antibody (Product # 15-0452-82) in Flow Cytometry"

Authors: Larson SR,Bortell N,Illies A,Crisler WJ,Matsuda JL,Lenz LL

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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

### More applications with references on thermofisher.com

### Misc (1)

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