

# CD45R (B220) Monoclonal Antibody (RA3-6B2), PerCP-eFluor 710, 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), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RA3-6B2
Conjugate	PerCP-eFluor™ 710
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_10717389

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	42 Publications

## 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<sub>lpr/lpr</sub> mutant mouse also express this antigen.

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

Applications Tested: This RA3-6B2 antibody has been tested by flow cytometric analysis of mouse splenocytes. 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 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.

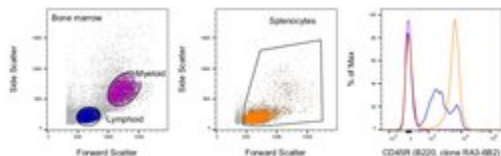
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

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 nm; Emission: 710 nm; Laser: Blue Laser.

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

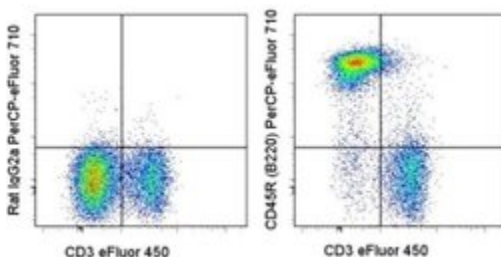
## Advanced Verification Data



### CD45R (B220) Antibody (46-0452-82)

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), PerCP-eFluor 710, eBioscience™



### CD45R (B220) Antibody (46-0452-82) in Flow

Staining of C57Bl/6 splenocytes with Anti-Mouse CD3 eFluor® 450 (Product # 48-0032-82) and 0.25  $\mu$ g of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.25  $\mu$ g of Anti-Human/Mouse CD45R (B220) PerCP-eFluor® 710 (right). Total viable cells were used for analysis.

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

## 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

## Flow Cytometry (42)

Frontiers in immunology

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

"Published figure using CD45R (B220) monoclonal antibody (Product # 46-0452-82) in Flow Cytometry"

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

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

Oncoimmunology

### The Interleukin (IL)-1R1 pathway is a critical negative regulator of PyMT-mediated mammary tumorigenesis and pulmonary metastasis.

"Published figure using CD45R (B220) monoclonal antibody (Product # 46-0452-82) in Flow Cytometry"

Authors: Dagenais M, Dupaul-Chicoine J, Douglas T, Champagne C, Morizot A, Saleh M

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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