

# CD45R (B220) Monoclonal Antibody (RA3-6B2), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RA3-6B2
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2662431

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	16 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	22 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 *lpr/lpr* 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

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

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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.

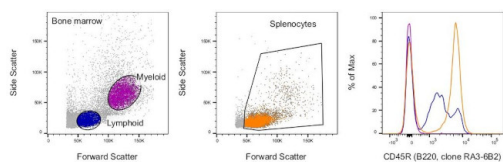
Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD45R (B220) Monoclonal Antibody (RA3-6B2), Super Bright™ 645, eBioscience™

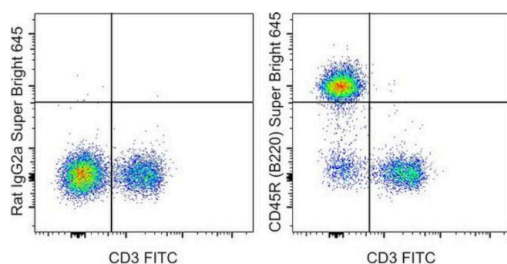
### CD45R (B220) Antibody (64-0452-82)

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. {RE}



### CD45R (B220) Antibody (64-0452-82) in Flow

Staining of C57Bl/6 splenocytes with Anti-Mouse CD3 FITC (Product # 11-0032-82) and 0.25  $\mu$ g of Rat IgG2a K Isotype Control Super Bright 645 (Product # 64-4321-82) (left) or 0.25  $\mu$ g of Anti-Human/Mouse CD45R (B220) Super Bright 645 (right). Total viable cells were used for analysis.



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## Immunohistochemistry (16)

Frontiers in immunology

### Role of CXCL5 in Regulating Chemotaxis of Innate and Adaptive Leukocytes in Infected Lungs Upon Pulmonary Influenza Infection.

"Published figure using CD45R (B220) monoclonal antibody (Product # 64-0452-82) in Immunohistochemistry"

Authors: Guo L,Li N,Yang Z,Li H,Zheng H,Yang J,Chen Y,Zhao X,Mei J,Shi H,Worthen GS,Liu L

Year  
2022

Cancers

### Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.

"Published figure using CD45R (B220) monoclonal antibody (Product # 64-0452-82) in Immunohistochemistry"

Authors: Jeanne A,Sarazin T,Charlé M,Moali C,Fichel C,Boulagnon-Rombi C,Callewaert M,Andry MC,Diesis E,Delolme F,Rioult D,Dedieu S

Year  
2021

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

## Immunohistochemistry (Paraffin) (1)

Pathogens (Basel, Switzerland)

### Pituitary Adenylate Cyclase-Activating Polypeptide Alleviates Intestinal, Extra-Intestinal and Systemic Inflammatory Responses during Acute *Campylobacter jejuni*-induced Enterocolitis in Mice.

"Published figure using CD45R (B220) monoclonal antibody (Product # 64-0452-82) in Immunohistochemistry (Paraffin)"

Authors: Heimesaat MM,Mousavi S,Kløve S,Genger C,Weschka D,Tamas A,Reglodi D,Bereswill S

Year  
2020

## Immunohistochemistry (Frozen) (1)

Science advances

### Mechanism of a COVID-19 nanoparticle vaccine candidate that elicits a broadly neutralizing antibody response to SARS-CoV-2 variants.

"Published figure using CD45R (B220) monoclonal antibody (Product # 64-0452-82) in Immunohistochemistry (Frozen)"

Authors: Zhang YN,Paynter J,Sou C,Fourfouris T,Wang Y,Abraham C,Ngo T,Zhang Y,He L,Zhu J

Year  
2021

## More applications with references on thermofisher.com

ICC/IF (2)

Flow (22)

Misc (1)

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