

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
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)	-	14 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	14 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 10⁵ to 10⁸ 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.

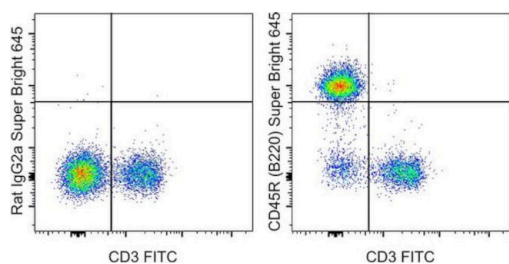
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of 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: 405 nm; Emission: 645 nm; Laser: Violet Laser

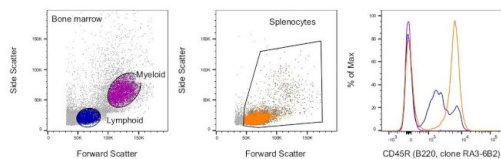
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

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



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

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



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}

View more figures on thermofisher.com

30 References

Immunohistochemistry (14)

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

Flow Cytometry (14)

JCI insight

Transient expansion and myofibroblast conversion of adipogenic lineage precursors mediate bone marrow repair after radiation.

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

Authors: Zhong L, Yao L, Holdreith N, Yu W, Gui T, Miao Z, Elkaim Y, Li M, Gong Y, Pacifici M, Maity A, Busch TM, Joeng KS, Cengel K, Seale P, Tong W, Qin L

Year
2022

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

More applications with references on thermofisher.com

Misc (1)

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