# CD45R (B220) Monoclonal Antibody (RA3-6B2), APC, 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), APC, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	RA3-6B2
Conjugate	APC
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_469395

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	6 Publications
Flow Cytometry (Flow)	0.25 μg/test	146 Publications
ELISA (ELISA)	-	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 spleen cells. This can be used at less than or equal to 0.25  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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Filtration: 0.2 µm post-manufacturing filtered.

# O Advanced Verification Data



#### CD45R (B220) Antibody (17-0452-82)

Figure 4. MSC-CM treatment alleviates mature B lymphocyte infiltration into the kidneys following UUO. (A) Representative images of Sham + PBS, Sham + MSC-CM, UUO + PBS and UUO + MSC-CM mice 3 days following surgery. Scale bar=50 um. Data are presented as the mean +- standard deviation (n=6-7). (B) Representative flow cytometry images of renal B220 + CD19 + B lymphocyte cytometry of Sham + PBS, Sham + MSC-CM, UUO + PBS and UUO + MSC-CM mice 3 days following surgery. (C) Quantitative analysis of B220 staining and (D) quantitative analysis of renal B220 + CD19 + B lymphocyte cytometry. Data are presented as the means +- standard deviation (n=6). \*P<0.05 vs. Sham + PBS group; \$ P<0.05 vs. UUO + PBS group. MSC-CM, mesenchymal stem cell-conditioned media; Sham + PBS, sham-operated and PBS treated; Sham + MSC-CM, sham-operated and MSC-CM treated; UUO, unilateral ureteral obstruction; UUO + PBS, UUO model and PBS treated; UUO + MSC-CM, UUO model and MSC-CM treated. Cell treatment validation info.

#### CD45R (B220) Antibody (17-0452-82)



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), APC, eBioscience™



#### CD45R (B220) Antibody (17-0452-82) in Flow

Staining of C57BI/6 splenocytes with Anti-Mouse CD3 PerCP-eFluor® 710 (Product # 46-0032-82) and 0.125 µg of Rat IgG2a K Isotype Control APC (Product # 17-4321-81) (left) or 0.125 µg of Anti-Human/Mouse CD45R (B220) APC (right). Cells in the lymphocyte gate were used for analysis.

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#### □ 154 References

#### Immunohistochemistry (1)

Journal of immunology (Baltimore, Md. : 1950)	
Silent development of memory progenitor B cells.	
"17-0452 was used in Immunofluorescence to support a model of memory B cell development in which extensive affinity /specificity maturation can take place within a B cell clone under some circumstances."	Dilution Not Cited
Authors: Aviszus K,Zhang X,Wysocki LJ	<b>Year</b> 2007

### Immunohistochemistry (Frozen) (6)

Proceedings of the National Academy of Sciences of the United States of America		
Bcl6 middle domain repressor function is required for T follicular helper cell differentiation and utilizes the corepressor MTA3.		
"17-0452 was used in Immunohistochemistry to discover that Bcl6 middle domain mediated repression is important for control of CD4 T-cell fate and function."		
Authors: Nance JP,Bélanger S,Johnston RJ,Hu JK,Takemori T,Crotty S	2015	
Journal of immunology (Baltimore, Md. : 1950)	Species	
Relapsing-remitting central nervous system autoimmunity mediated by		
GFAP-specific CD8 T cells.		
-0452 was used in Immunohistochemistry to investigate the mechanism by which CD8 T cells mediate relapsing- itting inflammatory CNS autoimmunity."		
Authors: Sasaki K,Bean A,Shah S,Schutten E,Huseby PG,Peters B,Shen ZT,Vanguri V,Liggitt D,Huseby ES		

View more IHC (F) references on thermofisher.com

### Flow Cytometry (146)

Frontiers in immunology Myeloid Cell CK2 Regulates Inflammation and Resistance to Bacterial	<b>Species</b> Not Applicable
Infection. "Published figure using CD45R (B220) monoclonal antibody (Product # 17-0452-82) in Flow Cytometry"	
Authors: Larson SR,Bortell N,Illies A,Crisler WJ,Matsuda JL,Lenz LL	<b>Year</b> 2021

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#### More applications with references on thermofisher.com

## ELISA (1)

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