

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

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Fish, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	RA3-6B2
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467254

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	50 Publications
Immunohistochemistry (Paraffin) (IHC (P))	5 µg/mL	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	5 µg/mL	6 Publications
Immunocytochemistry (ICC/IF)	-	10 Publications
Flow Cytometry (Flow)	1 µg/test	216 Publications
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	-
Neutralization (Neu)	-	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: The RA3-6B2 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen or formalin-fixed paraffin embedded tissue sections. RA3-6B2 has also been reported in functional studies of B cells. (Please use Functional Grade purified RA3-6B2, cat. 16-0452, in functional assays.)

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 1 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. The RA3-6B2 antibody has been tested by immunohistochemistry of formalin-fixed paraffin embedded mouse tissue using low and high pH antigen retrieval and can be used at less than or equal to 5 µg/mL. The RA3-6B2 antibody has been tested by immunohistochemistry of frozen mouse tissue and can be used at less than or equal to 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

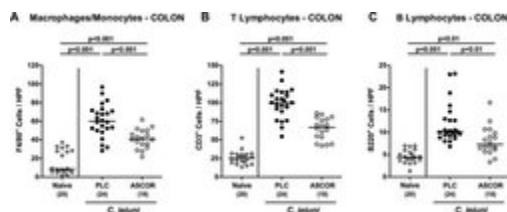
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

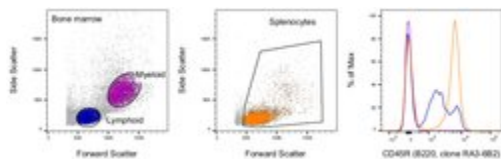
CD45R (B220) Antibody (14-0452-82)

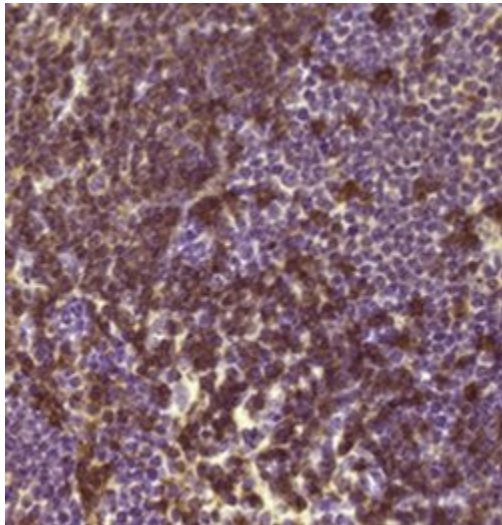
Figure 4 Colonic immune cell responses in ascorbate treated mice following *C. jejuni* infection. Starting four days before peroral *C. jejuni* infection on days 0 and 1, secondary abiotic IL-10^{-/-} mice were treated with synthetic ascorbate (ASCOR; open circles) or placebo (PLC; filled circles) via the drinking water. The average numbers of (A) macrophages and monocytes (positive for F4/80), (B) T lymphocytes (positive for CD3), and (C) B lymphocytes (positive for B220) in the colonic mucosa and lamina propria from six high power fields (HPF, 400x magnification) per mouse were assessed microscopically in immunohistochemically stained large intestinal paraffin sections at day 6 post-infection. Naive mice (open diamonds) served as uninfected and untreated controls. Medians, significance levels (p-values) assessed by the one-way ANOVA test followed by Tukey correction and numbers of analyzed animals (in parentheses) are indicated. Data were pooled from four independent experiments. Cell treatment validation info.



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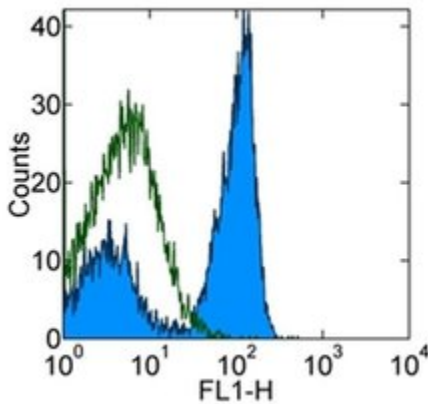
Staining of mouse splenocytes and bone marrow cells. As expected based on known relative expression patterns, CD45R (B220) clone RA3-6B2 stains subsets in both the splenocytes gate and the bone marrow lymphoid gate but not the bone marrow myeloid gate. Details: Balb/c bone marrow cells (left) and splenocytes (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.





CD45R (B220) Antibody (14-0452-82) in IHC (P)

Immunohistochemistry of formalin-fixed paraffin embedded mouse spleen using 5 µg /mL Anti-Human/Mouse CD45R (B220) Purified followed by Anti-Rat IgG Biotin, Avidin HRP, and DAB visualization. Nuclei are counterstained with hematoxylin.



CD45R (B220) Antibody (14-0452-82) in Flow

Staining of C57Bl/6 splenocytes with 0.5 µg of Rat IgG2a Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 µg of Anti-Human/Mouse CD45R (B220) Purified (filled histogram) followed by Anti-Rat IgG FITC (Product # 11-4811-85). Cells in the lymphocyte gate were used for analysis.

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Western Blot (1)

Histochemistry and cell biology

Cellular localization and regulation of receptors and enzymes of the endocannabinoid system in intestinal and systemic inflammation.

"14-0452 was used in Flow cytometry/Cell sorting to identify changes in gene expression of members of the endocannabinoid system in situ and uncovering a distinct cellular role in the regulation of the immune response to intestinal and systemic inflammation."

Authors: Grill M,Hasenoehrl C,Kienzl M,Kargl J,Schicho R

Species
Mouse

Dilution
1:250

Year
2019

Immunohistochemistry (50)

PloS one

High-throughput analysis of lung immune cells in a combined murine model of agriculture dust-triggered airway inflammation with rheumatoid arthritis.

"Published figure using CD45R (B220) monoclonal antibody (Product # 14-0452-82) in Immunohistochemistry"

Authors: Gaurav R,Mikuls TR,Thiele GM,Nelson AJ,Niu M,Guda C,Eudy JD,Barry AE,Wyatt TA,Romberger DJ,Duryee MJ,England BR,Poole JA

Species
Not Applicable

Dilution
Not Cited

Year
2021

Cell death & disease

Hypoxia-induced miR-210 modulates the inflammatory response and fibrosis upon acute ischemia.

"Published figure using CD45R (B220) monoclonal antibody (Product # 14-0452-82) in Immunohistochemistry"

Authors: Zaccagnini G,Greco S,Longo M,Maimone B,Voellenkle C,Fuschi P,Carrara M,Creo P,Maselli D,Tirone M, Mazzone M,Gaetano C,Spinetti G,Martelli F

Species
Not Applicable

Dilution
Not Cited

Year
2021

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Immunohistochemistry (Paraffin) (3)

Disease models & mechanisms

Murine myeloid cell MCP1P1 suppresses autoimmunity by regulating B-cell expansion and differentiation.

"Published figure using CD45R (B220) monoclonal antibody (Product # 14-0452-82) in Immunohistochemistry"

Authors: Dobosz E,Lorenz G,Ribeiro A,Wüf V,Wadowska M,Kotlowski J,Schmaderer C,Potempa J,Fu M,Kozziel J, Lech M

Species
Mouse
Not Applicable

Dilution
1:400
Not Cited

Year
2021

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More applications with references on thermofisher.com

IHC (F) (6) ICC/IF (10) Flow (216) ELISA (1) Neu (1)

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