

CD45R (B220) Monoclonal Antibody (RA3-6B2), eFluor 450, 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), eFluor 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RA3-6B2
Conjugate	eFluor® 450
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_1548761

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	19 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.5 µg/test	95 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 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.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

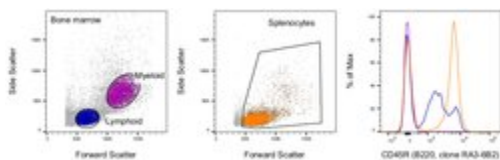
Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

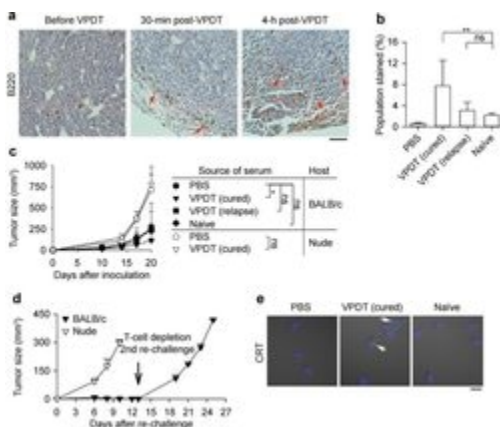
CD45R (B220) Antibody (48-0452-82)

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.

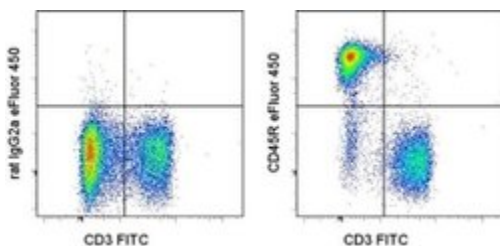


CD45R (B220) Antibody (48-0452-82)

Figure 6 Involvement of humoral immune components in the VPDT-mediated immune response. (a) B-cell infiltration. After VPDT, paraffin tumor sections were stained with an anti-B220 antibody (brown). Arrows indicate the sites of B-cell infiltration. Bar = 200 µm. (b) Up-regulation of CT26-specific antibodies. CT26 tumor cells were incubated either with sera obtained from different groups of mice or with PBS, together with propidium iodide, followed by a secondary antibody against mouse IgG. Intact cells (propidium iodide -ve) were analyzed by flow cytometry. Sera from naive control, VPDT (cured) and VPDT (relapse) groups, n = 6, 10, and 6, respectively; PBS, n = 3. ** p < 0.005; ns, not significant. (c) Anti-tumor effects of serum. Filtered sera from different groups of mice or PBS were mixed with 2 x 10⁵ CT26 cells. The suspension was inoculated subcutaneously into BALB/c mice or nude mice. Tumor growth was observed for 20 days. For the BALB/c mice, PBS control, n = 11; sera from the naive control, VPDT (cured) and VPDT (relapse) groups, n = 5, 14, and 6, respectively. For the nude mice, PBS control, n = 5; serum from the VPDT (cured) group, n = 5. * p < 0.05; ns, not significant. (d) Immunomodulatory effects of serum. On Day 20 after the first inoculation, a CT26 tumor cell re-challenge was given to the BALB/c and nude mice that had received the serum of the VPDT-cured mice. BALB/c mice, n = 11; nude mice, n = 4. The tumor size was monitored for 12 days. On Day 13 Cell treatment validation info.



Product Images For CD45R (B220) Monoclonal Antibody (RA3-6B2), eFluor 450, eBioscience™



CD45R (B220) Antibody (48-0452-82) in Flow

Staining of C57BL/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.25 µg of Rat IgG2a kappa Isotype Control eFluor® 450 (Product # 48-4321-82) (left) or 0.25 µg of Anti-Human/Mouse CD45R (B220) eFluor® 450 (right). Total viable cells were used for analysis.

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Immunohistochemistry (19)

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 # 48-0452-82) in Immunohistochemistry"
 Authors: Gaurav R,Mikulis 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 # 48-0452-82) 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) (2)

European journal of microbiology & immunology

Anti-inflammatory Effects of the Octapeptide NAP in Human Microbiota-Associated Mice Suffering from Subacute Ileitis.

"Published figure using CD45R (B220) monoclonal antibody (Product # 48-0452-82) in Immunohistochemistry (Paraffin)"
 Authors: Escher U,Giladi E,Dunay IR,Bereswill S,Gozes I,Heimesaat MM

Species
Not Applicable

Dilution
Not Cited

Year
2018

Cellular & molecular immunology

Anti-tumor immunity of BAM-SiPc-mediated vascular photodynamic therapy in a BALB/c mouse model.

"48-0452 was used in Immunohistochemistry on paraffin embedded tissues to examine the role of both cell-mediated and humoral adaptive immune components in anti-cancer photodynamic therapy."
 Authors: Yeung HY,Lo PC,Ng DK,Fong WP

Species
Mouse

Dilution
Not Cited

Year
2017

More applications with references on thermofisher.com

- IHC (F) (1)
- ICC/IF (4)
- Flow (95)

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