

### **Product datasheet**

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# ARG22026 anti-CD45R / B220 antibody [RA3-6B2] (Biotin)

Package: 100 μg Store at: 4°C

#### **Summary**

Product Description Biotin-conjugated Rat Monoclonal antibody [RA3-6B2] recognizes CD45R / B220

Tested Reactivity Hu, Ms, Cat

Tested Application BL, FACS, IHC-Fr, IHC-P, WB

Specificity Mouse/Human/Feline CD45R

Host Rat

Clone RA3-6B2

Isotype IgG2a, kappa
Target Name CD45R / B220

Species Mouse

Immunogen Abelson Murine leukemia virus-induced pre-B cell lymphoma

Conjugation Biotin

Alternate Names LY5; GP180; Receptor-type tyrosine-protein phosphatase C; CD45; L-CA; CD antigen CD45; Leukocyte

common antigen; CD45R; LCA; T200; EC 3.1.3.48; B220

#### **Application Instructions**

| Application table | Application  | Dilution          |
|-------------------|--|-------------------|
|                   | BL   | Assay-dependent   |
|                   | FACS   | < 1 μg/10^6 cells |
|                   | IHC-Fr   | Assay-dependent   |
|                   | IHC-P  | Assay-dependent   |
|                   | WB   | Assay-dependent   |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                   |

#### **Properties**

| Form                | Liquid  |  |
|---------------------|---|--|
| Buffer              | PBS and 0.1% Sodium azide.  |  |
| Preservative        | 0.1% Sodium azide   |  |
| Concentration       | 0.5 mg/ml   |  |
| Storage instruction | Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be |  |

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gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 19264 Mouse</u>

GeneID: 5788 Human

Swiss-port # P08575 Human

Gene Symbol PTPRC

Gene Full Name protein tyrosine phosphatase, receptor type, C

Background CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling

molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided

by RefSeq, Jun 2012]

Function CD45: Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor.

Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby

modulates LYN activity.

(Microbial infection) Acts as a receptor for human cytomegalovirus protein UL11 and mediates binding

of UL11 to T-cells, leading to reduced induction of tyrosine phosphorylation of multiple signaling

proteins upon T-cell receptor stimulation and impaired T-cell proliferation. [UniProt]

Highlight Related products:

CD45R antibodies; CD45R Duos / Panels; Anti-Rat IgG secondary antibodies;

Related news:

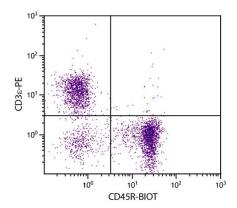
**Exploring Antiviral Immune Response** 

Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody

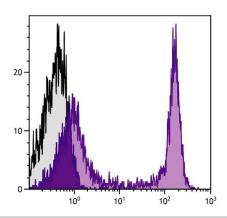
Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.



## $\ensuremath{\mathsf{ARG22026}}$ anti-CD45R / B220 antibody [RA3-6B2] (Biotin) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG22026 anti-CD45R / B220 antibody [RA3-6B2] (Biotin) and <u>ARG20819</u> anti-CD3e antibody [C363.29B] (PE) followed by Streptavidin (FITC).



### ARG22026 anti-CD45R / B220 antibody [RA3-6B2] (Biotin) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG22026 anti-CD45R / B220 antibody [RA3-6B2] (Biotin) followed by Streptavidin (Spectral Red).