ARG22030
anti-CD45R / B220 antibody [RA3-6B2] (PE-Cyanine 7)

Package: 50 µg
Store at: 4°C

Summary

Product Description	PE-Cyanine 7-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
Clonality	Monoclonal
Clone	RA3-6B2
Isotype	IgG2a, kappa
Target Name	CD45R / B220
Species	Mouse
Immunogen	Abelson Murine leukemia virus-induced pre-B cell lymphoma
Conjugation	PE-Cyanine 7
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	< 0.2 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

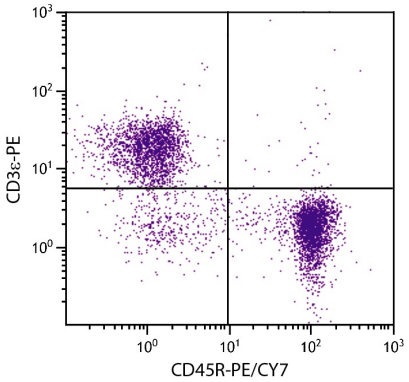
Form	Liquid
Buffer	PBS, 0.1% Sodium azide and Sucrose.
Preservative	0.1% Sodium azide
Stabilizer	Sucrose
Concentration	0.1 mg/ml

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

Bioinformation

Database links	GeneID: 19264 Mouse 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.

Images



ARG22030 anti-CD45R / B220 antibody [RA3-6B2] (PE-Cyanine 7) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG22030 anti-CD45R / B220 antibody [RA3-6B2] (PE-Cyanine 7) and ARG20819 anti-CD3e antibody [C363.29B] (PE).