

# Product datasheet

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# ARG21023 anti-CD45 antibody [104] (PE-Cyanine 5.5)

Package: 50 μg Store at: 4°C

## Summary

Product Description PE-Cyanine 5.5-conjugated Mouse Monoclonal antibody [104] recognizes CD45

Tested Reactivity Ms

Tested Application FACS, IHC-Fr

Specificity Mouse CD45.2. The clone 104 recognizes CD45 (leukocyte common antigen) on all leukocytes of mouse

strains expressing the CD45.2 allotype (e.g., A, AKR, BALB/c, CBA/Ca, CBA/J, C3H/He, C57BL, C57BR,

C57L, C58, DBA/1, DBA/2, NZB, SWR, 129).

Host Mouse

Clonality Monoclonal

Clone 104

Isotype IgG2a, kappa

Target Name CD45
Species Mouse

Immunogen B10.S mouse thymocytes and splenocytes

Conjugation PE-Cyanine 5.5

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
	FACS	< 0.3 μg/10^6 cells
	IHC-Fr	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.

#### Bioinformation

Background

Database links GenelD: 19264 Mouse

Gene Symbol PTPRC

Gene Full Name protein tyrosine phosphatase, receptor type, C

protein tyrosine prisopriatase, reseptor type, t

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]

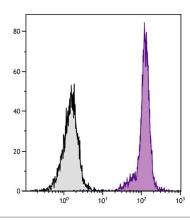
Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

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

Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.

### **Images**



#### ARG21023 anti-CD45 antibody [104] (PE-Cyanine 5.5) FACS image

Flow Cytometry: BALB/c Mouse bone marrow cells stained with ARG21023 anti-CD45 antibody [104] (PE-Cyanine 5.5).