

# Product datasheet

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# ARG22018 anti-CD45 antibody [I3/2.3] (FITC)

Package: 100 μg Store at: 4°C

### Summary

Product Description FITC-conjugated Rat Monoclonal antibody [13/2.3] recognizes CD45

Tested Reactivity Ms

Tested Application FACS, IHC-Fr
Specificity Mouse CD45

Host Rat

**Clonality** Monoclonal

Clone I3/2.3

Isotype IgG2b, lambda

Target Name CD45
Species Mouse

Immunogen T1M1 (Thy-1-c) cells

Conjugation FITC

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	< 1 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 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

gently mixed before use.

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

#### Bioinformation

Database links GeneID: 19264 Mouse

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]

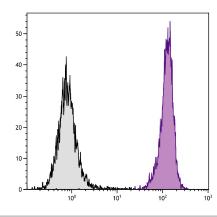
Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

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

Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.

#### **Images**



#### ARG22018 anti-CD45 antibody [I3/2.3] (FITC) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG22018 anti-CD45 antibody [I3/2.3] (FITC).