

Product datasheet

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ARG21366 anti-CD45 antibody [2D1] (PE)

Package: 100 tests Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [2D1] recognizes CD45

Tested Reactivity Hu

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

Specificity Human CD45.

Host Mouse

Clonality Monoclonal

Clone 2D1

Isotype IgG1, kappa

Target Name CD45
Species Human

Immunogen Human peripheral blood mononuclear cells

Conjugation PE

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	10 μl/10^6 cells
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
	WB	Assay-dependent
Application Note	WB: Under non-reducing condition. * 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	
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

Database links <u>GeneID: 5788 Human</u>

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 phosphata.

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]

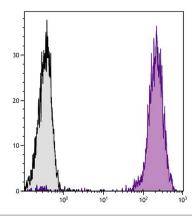
Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

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

Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.

Images



ARG21366 anti-CD45 antibody [2D1] (PE) FACS image

Flow Cytometry: Human peripheral blood lymphocytes stained with ARG21366 anti-CD45 antibody [2D1] (PE).