

Product datasheet

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ARG56005 anti-CD45 antibody [136-4B5]

Package: 50 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [136-4B5] recognizes CD45

Tested Reactivity Hu

Tested Application IHC-P

Host Mouse

Clonality Monoclonal
Clone 136-4B5

Isotype IgG1, kappa

Target Name CD45
Species Human

Immunogen Stimulated Human leukocytes.

Conjugation Un-conjugated

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
	IHC-P	0.5 - 1 μg/ml
Application Note	IHC-P: Antigen Retrieval: boil tissue sections in 10 mM Citrate buffer (pH 6.0) for 10-20 min, followed by cooling at RT for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations	

Properties

Form Liquid

Purification Purification with Protein G.

Buffer PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA

should be determined by the scientist.

Preservative 0.05% Sodium azide

Stabilizer 0.1 mg/ml BSA

Concentration 0.2 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. 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 <u>GeneID: 5788 Human</u>

Swiss-port # P08575 Human

Gene Symbol PTPRC

Gene Full Name protein tyrosine phosphatase, receptor type, C

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

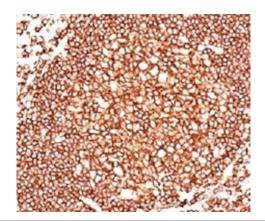
Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody

Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.

Cellular Localization Cell surface and cytoplasmic

Images



ARG56005 anti-CD45 antibody [136-4B5] IHC-P image

Immunohistochemistry: Human tonsil stained with ARG56005 anti-CD45 antibody [136-485].