ARG21367
anti-CD45 antibody [F10-89-4]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [F10-89-4] recognizes CD45
Tested Reactivity	Hu, Hrs
Tested Application	FACS, ICC/IF, IHC-Fr, IP, WB
Specificity	Human/Horse CD45.
Host	Mouse
Clonality	Monoclonal
Clone	F10-89-4
Isotype	IgG2a, kappa
Target Name	CD45
Species	Human
Immunogen	Purified T cells from human lymph nodes
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
FACS	< 1 µg/10^6 cells
ICC/IF	Assay-dependent
IHC-Fr	Assay-dependent
IP	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

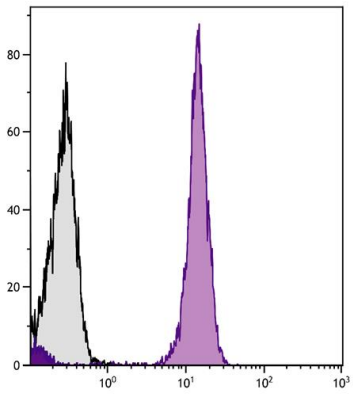
Form	Liquid
Buffer	BBS (pH 8.2)
Concentration	0.1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

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

Bioinformation

Database links	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]
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



ARG21367 anti-CD45 antibody [F10-89-4] FACS image

Flow Cytometry: Human peripheral blood lymphocytes stained with ARG21367 anti-CD45 antibody [F10-89-4] followed by ARG23802 Goat anti-Mouse IgG2a antibody (FITC) (pre-adsorbed).