ARG46781
anti-CD45 antibody

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes CD45
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Specificity	Using Jurkat cell lysate detects a band 180-220 kDa by Western blot.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	CD45
Species	Human
Immunogen	Purified recombinant peptide derived from within residues 1,260 aa to the C-terminus of human CD45 produced in E. coli.
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	1:250 - 1:1000
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 180-220 kDa

Properties

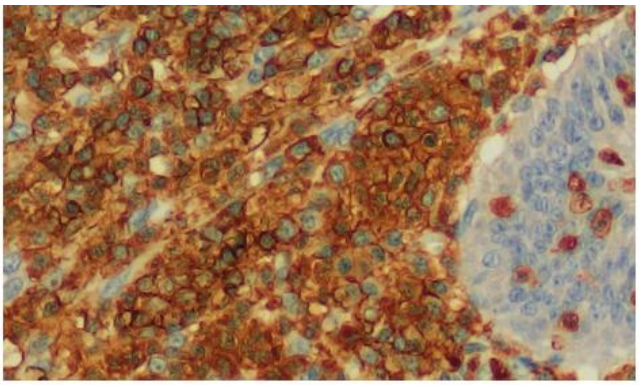
Form	Liquid
Purification	Epitope affinity purified
Buffer	PBS, 0.05% Sodium azide and 20% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	20% Glycerol
Concentration	3 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot 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

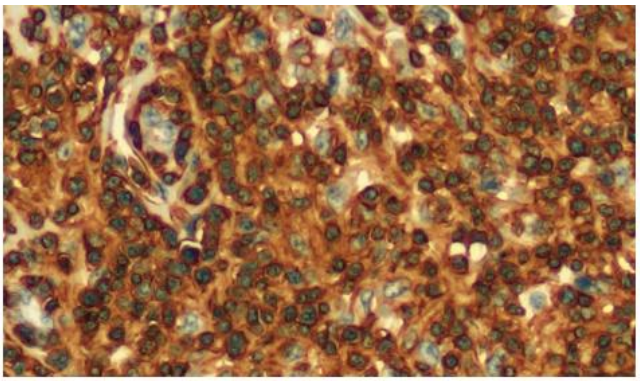
Gene Symbol	PTPRC
Gene Full Name	protein tyrosine phosphatase, receptor type, C
Background	CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic 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]
Calculated Mw	147 kDa
PTM	Heavily N- and O-glycosylated.

Images



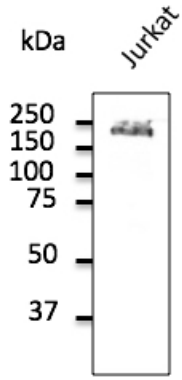
ARG46781 anti-CD45 antibody IHC-P image

Immunohistochemistry: Human appendix stained with ARG46781 anti-CD45 antibody at 1:750 dilution.



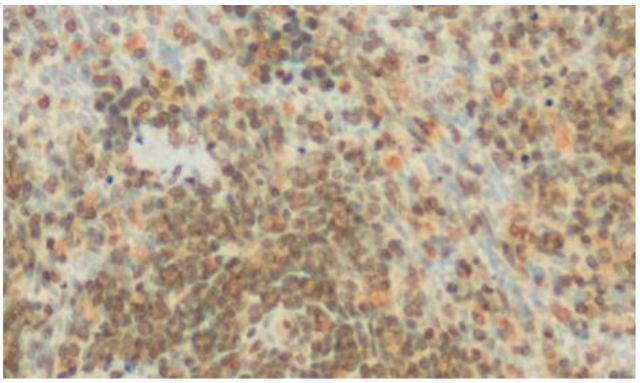
ARG46781 anti-CD45 antibody IHC-P image

Immunohistochemistry: Human lymph node stained with ARG46781 anti-CD45 antibody at 1:500 dilution.



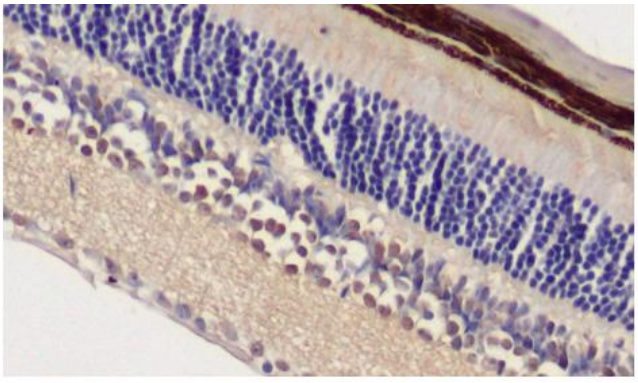
ARG46781 anti-CD45 antibody WB image

Western blot: Jurkat stained with ARG46781 anti-CD45 antibody at 1:500 dilution.



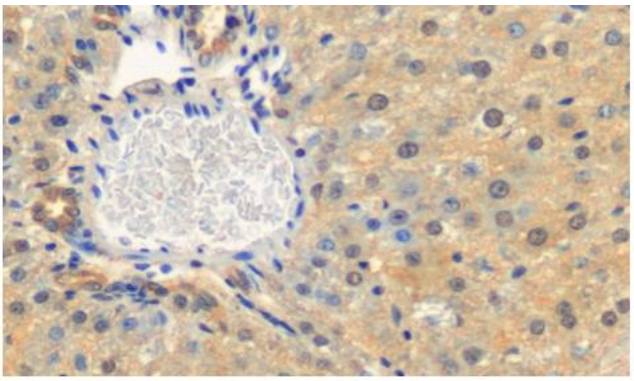
ARG46781 anti-CD45 antibody IHC-P image

Immunohistochemistry: Rat spleen stained with ARG46781 anti-CD45 antibody at 1:500 dilution.



ARG46781 anti-CD45 antibody IHC-P image

Immunohistochemistry: Mouse eye stained with ARG46781 anti-CD45 antibody at 1:750 dilution.



ARG46781 anti-CD45 antibody IHC-P image

Immunohistochemistry: Mouse liver stained with ARG46781 anti-CD45 antibody at 1:500 dilution.