

CD45 Polyclonal Antibody

Catalog # AP68948

Specification

CD45 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>P08575</u> Human, Mouse, Rat Rabbit Polyclonal

CD45 Polyclonal Antibody - Additional Information

Gene ID 5788

Other Names PTPRC; CD45; Receptor-type tyrosine-protein phosphatase C; Leukocyte common antigen; L-CA; T200; CD antigen CD45

Dilution WB~~1:1000 IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

CD45 Polyclonal Antibody - Protein Information

Name PTPRC (HGNC:9666)

Synonyms CD45

Function

Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor (PubMed:35767951). 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 (By similarity). Interacts with CLEC10A at antigen presenting cell-T cell contact; CLEC10A on immature dendritic cells recognizes Tn antigen- carrying PTPRC/CD45 receptor on effector T cells and modulates T cell activation threshold to limit autoreactivity.

Cellular Location



Cell membrane; Single-pass type I membrane protein. Membrane raft. Synapse. Note=Colocalized with DPP4 in membrane rafts.

Tissue Location

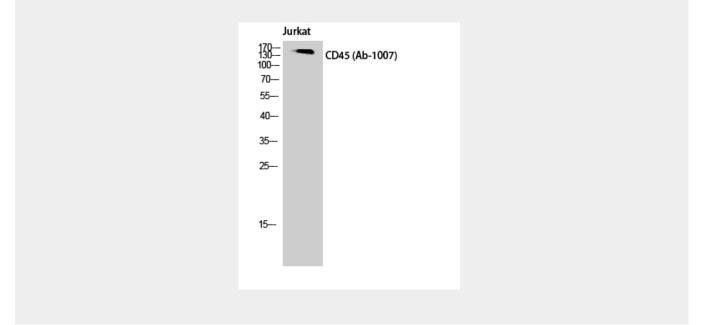
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

CD45 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

CD45 Polyclonal Antibody - Images



CD45 Polyclonal Antibody - Background

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 (By similarity).