

# CD45 Antibody

Rabbit mAb Catalog # AP90351

### **Product Information**

**Application** WB, IHC, IF, FC, ICC, IHF

Primary Accession P08575
Reactivity Human
Clonality Monoclonal

Other Names CD45; B220; GP180; LCA; PTPRC; T200 leukocyte common antigen;

IsotypeRabbit IgGHostRabbitCalculated MW147486

## **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:100 FC 1:20

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human CD45

**Description** 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). Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Storage Condition and Buffer

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.

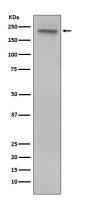
**Tissue Location** Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes.

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.

# **Images**



Western blot analysis of CD45 expression in Jurkat cell lysate.

Image not found: 202311/AP90351-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human spleen, using CD45 Antibody .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.