

CD45 antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22447a

Specification

CD45 antibody - Product Information

Application WB,E
Primary Accession P08575
Host Rabbit
Clonality polyclonal
Isotype Rabbit Ig
Calculated MW 147486

CD45 antibody - Additional Information

Gene ID 5788

Other Names

Receptor-type tyrosine-protein phosphatase C, 3.1.3.48, Leukocyte common antigen, L-CA, T200, CD45, PTPRC (HGNC:9666), CD45

Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD45 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD45 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



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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).

Cellular Location

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

Tissue Location

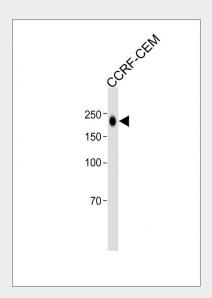
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

CD45 antibody - Protocols

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

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

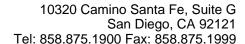
CD45 antibody - Images



All lanes: Anti-CD45 antibody at 1:1000 dilution + CCRF-CEM whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 200 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

CD45 antibody - Background

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).

CD45 antibody - References

Streuli M., et al. J. Exp. Med. 166:1548-1566(1987).
Ralph S.J., et al. EMBO J. 6:1251-1257(1987).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Gregory S.G., et al. Nature 441:315-321(2006).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.