

CD45 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS12373

Specification

CD45 Antibody (C-Terminus) - Product Information

Application IHC-P
Primary Accession P08575
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 147kDa KDa
Dilution IHC-P~~N/A

CD45 Antibody (C-Terminus) - 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, CD45

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

CD45 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CD45 Antibody (C-Terminus) - 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.

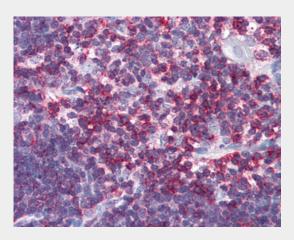
Volume 125 µl

CD45 Antibody (C-Terminus) - Protocols

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

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

CD45 Antibody (C-Terminus) - Images



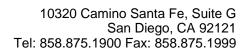
Anti-CD45 antibody IHC of human thymus.

CD45 Antibody (C-Terminus) - 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).

CD45 Antibody (C-Terminus) - 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).





Tsai A.Y.M.,et al.Mol. Cell. Biol. 9:4550-4555(1989). Hall L.R.,et al.J. Immunol. 141:2781-2787(1988).