

CD45 Antibody (clone PD7/26/16 + 2B11)
Mouse Monoclonal Antibody
Catalog # ALS13882**Specification**

CD45 Antibody (clone PD7/26/16 + 2B11) - Product Information

Application	IHC-P, IF, FC
Primary Accession	P08575
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	147kDa KDa
Dilution	IHC-P~~N/A IF~~1:50~200 FC~~1:10~50

CD45 Antibody (clone PD7/26/16 + 2B11) - 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

Stable for 24 months when stored at 2-8°C.

Precautions

CD45 Antibody (clone PD7/26/16 + 2B11) is for research use only and not for use in diagnostic or therapeutic procedures.

CD45 Antibody (clone PD7/26/16 + 2B11) - 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.

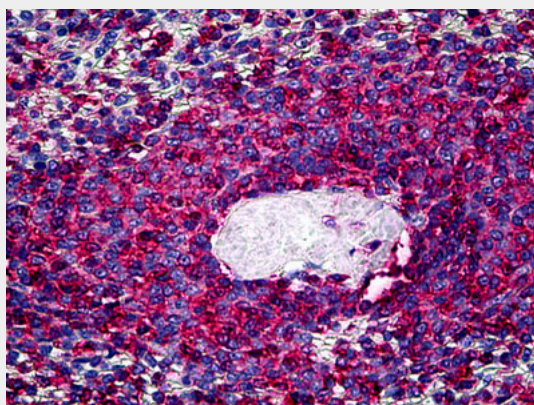
Tissue Location

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 Antibody (clone PD7/26/16 + 2B11) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD45 Antibody (clone PD7/26/16 + 2B11) - Images

Anti-CD45 antibody IHC of human spleen.

CD45 Antibody (clone PD7/26/16 + 2B11) - 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 (clone PD7/26/16 + 2B11) - 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).