

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

Mouse Monoclonal Antibody Catalog # ALS13882

# Specification

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

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P08575</u> Human Mouse Monoclonal 147kDa KDa

## 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 (<u>HGNC:9666</u>)

## Synonyms CD45

#### Function

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).

## **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Membrane raft 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:



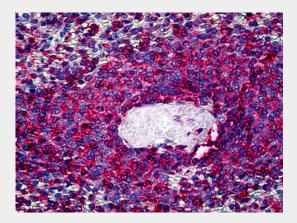
Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

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

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

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

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).