# Anti-CD45RB [PD7/26] mAb

Catalogue number: 151364 Sub-type: Primary antibody

Images:

#### Contributor

**Inventor:** Jacqueline Cordell Institute: University of Oxford

Images:

## **Tool details**

#### \*FOR RESEARCH USE ONLY

Name: Anti-CD45RB [PD7/26] mAb

ols.org Alternate name: Protein Tyrosine Phosphatase; Receptor Type C; CD45 Antigen; CD45; L-CA; T2; Protein Tyrosine Phosphatase; Receptor Type; C Polypeptide; T2 Leukocyte Common Antigen; T2 Glycoprotein; EC 3.1.3.48; GP18; CD45R; B22; LCA; LY5

Class: Monoclonal

Conjugate: Unconjugated

Description: Monoclonal antibody capable of detecting CD45RB in paraffin-embedded samples, and

aids in differentiating between lymphoid and non-lymphoid tumours of B-cell origin.

**Purpose:** Parental cell: Organism: Tissue: Model: Gender:

Isotype: IqG1 Reactivity: Human

**Selectivity:** Host: Mouse

**Immunogen:** Human PBL maintained in T-cell growth factor

Immunogen UNIPROT ID: P08575

Sequence:

**Growth properties: Production details:** 

Formulation:

Recommended controls: **Bacterial resistance:** 

# Selectable markers: Additional notes:

## **Target details**

Target: Protein tyrosine phosphatase, receptor type, C (PTPRC, CD45RB)

#### **Target alternate names:**

Target background: CD45RB is a protein tyrosine phosphatase receptor that is present on most hematopoietic cells and absent on non-hematopoietic cells. It is a transmembrane pan-leukocyte protein with tyrosine phosphatase activity and is involved in the regulation of signal transduction in haematopoiesis and the threshold of T cell antigen receptor (TCR) signalling. This is via dephosphorylation of protein tyrosine kinases (e.g. Lck and Fyn). Expression of CD45RB is more limited than CD45 and can only be found on T cell subsets, B, NK, and myeloid cells. Regulatory T cells (Tregs) have been shown to express low levels of CD45RB, linked to increased migration to sites of infection. CD45RB is expressed on the majority of lymphomas and leukaemia's of B-cell origin. Anti-CD45RB is useful in differentiating between lymphoid and non-lymphoid tumours. CD45 regulates Srcfamily kinases, integrin-mediated signal transduction pathways and can suppress JAK kinases, acting as a negative regulator of cytokine receptor signalling. All CD45 isoforms share the same transmembrane and cytoplasmic domains, however their extracellular domains vary, depending on the spliced product. Anti-CD45RB is capable of recognising antigens in fixed and paraffin-embedded tissues, unlike other reagents of similar specificity. This antibody reacts with an epitope which does not become denatured or masked during fixation and embedding.

#### Molecular weight:

Ic50:

## **Applications**

Application: FACS; IHC; IF; WB

**Application notes:** 

## **Handling**

Format: Liquid

Concentration: 1 mg/ml

Passage number: Growth medium: Temperature: Atmosphere: Volume:

Storage medium: Storage buffer:

PBS with 0.02% azide

Storage conditions: Store at -20° C frozen. Avoid repeated freeze / thaw cycles

Shipping conditions: Shipping at 4° C

### Related tools

**Related tools:** 

### References

**References:** Schmidt RE (1989) Non-lineage/natural killer Section report: new and previously defined cluster. In Knapp W, et al (eds) Leucocyte Typing IV, Oxford University Press, Oxford, New York and Tokyo, p 517-542.; Schwinzer R (1989) Cluster report: CD45/CD45R. In Knapp W, et al (eds) Leucocyte Typing IV, Oxford University Press, Oxford, New York and Tokyo, p 628-634.

