

Anti-CD45RB [PD7/26] rAb

Catalogue number: 154813

Sub-type: Primary antibody

Images:

Contributor

Inventor:

Institute: Absolute Antibody ; University of Oxford

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CD45RB [PD7/26] rAb

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: Recombinant

Conjugate: Unconjugated

Description: Recombinant monoclonal antibody capable of detecting CD45RB in paraffin-embedded samples, and aids in differentiating between lymphoid and non-lymphoid tumours of B-cell origin. Background and Research Application 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 leukaemias of B-cell origin. Anti-CD45RB is useful in differentiating between lymphoid and non-lymphoid tumours. CD45 regulates Src-family 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. Recombinant anti-CD45RB is capable of recognising antigens in fixed and paraffin-embedded tissues, unlike other reagents of similar specificity. It is the recombinant version of anti-CD45RB. This antibody reacts with an epitope which does not become denatured or masked during fixation and embedding.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

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: Recombinant monoclonal antibody capable of detecting CD45RB in paraffin-embedded samples, and aids in differentiating between lymphoid and non-lymphoid tumours of B-cell origin. Background and Research Application 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 Src-family 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. Recombinant anti-CD45RB is capable of recognising antigens in fixed and paraffin-embedded tissues, unlike other reagents of similar specificity. It is the recombinant version of anti-CD45RB. This antibody reacts with an epitope which does not become denatured or masked during fixation and embedding.

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

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

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: A hydrogel-endothelial cell implant mimics infantile hemangioma: modulation by survivin and the Hippo pathway. ; Ding et al. 2013. PLoS One. 8(5):e63628. PMID: 23675495. ; HIF-1a transgenic bone marrow cells can promote tissue repair in cases of corticosteroid-induced osteonecrosis of the femoral head in rabbits. ; JC70: a new monoclonal antibody that detects vascular endothelium associated antigen on routinely processed tissue sections. ; Muller WA, Kishimoto T, et al (eds) 1997. Leucocyte Typing VI, Garland Publishing Inc., New York and London, p 362-364. ISBN-13: 978-0815327455 ; Novel modeling of cancer cell signaling pathways enables systematic drug repositioning for distinct breast cancer metastases. ; Orecchia et al. 2011. PLoS One. 6(9):e24307. PMID: 21931678. ; Parums et al. 1990. J Clin Pathol. 43(9):752-7. PMID: 2212067. ; Sirtinol treatment reduces inflammation in human dermal microvascular endothelial cells. ; Tissue factor-bearing microparticles and CA19.9: two players in pancreatic cancer-associated thrombosis? ; Tsuneki et al. 2015. Lab Invest. :. PMID: 25961170. ; Woei-A-Jin et al. 2016. Br J Cancer. :. PMID: 27404454. ; Zhao et al. 2013. Cancer Res. 73(20):6149-63. PMID: 24097821.

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