



Anti-Ptprc Monoclonal antibody, clone B30 [PE/Cy5®] (CABT-BL8239)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Isotype	IgG2a, κ
Source/Host	Mouse
Species Reactivity	Mouse
Clone	B30
Purification	Affinity chromatography
Conjugate	PE/Cy5
Applications	FC
Format	Liquid
Concentration	0.2 mg/mL
Size	50 µg, 100 µg
Buffer	PBS, pH 7.2, with 0.1% gelatin
Preservative	0.09% Sodium Azide
Storage	4°C, store in dark, DO NOT FREEZE!

BACKGROUND

Introduction CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of

all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis. CD45RA is an isoform of the CD45 complex and has restricted expression between different subtypes of lymphoid cells.

Keywords

PTPRC; protein tyrosine phosphatase, receptor type, C; CD45; receptor-type tyrosine-protein phosphatase C; GP180; LCA; T200; CD45 antigen; T200 glycoprotein; leukocyte common antigen; leukocyte-common antigen; T200 leukocyte common antigen; protein tyrosine phosphatase, receptor type, c polypeptide; LY5; B220; L-CA; CD45R;

GENE INFORMATION

Entrez Gene ID[19264](#)**UniProt ID**[Q8C6Q7](#)
