PE/iFluor™ 594 Anti-human CD45 Antibody *HI151*

Catalog number: 104521Y0, 104521Y1, 104521Y2
Unit size: 25 tests, 100 tests, 500 tests

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD45 (Leukocyte Common Antigen (LCA), T200, PTPRC)
Clone	HI151
Conjugate	PE/iFluor™ 594

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 594 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/iFluor™ 594
Excitation Wavelength	566 nm
Emission Wavelength	606 nm

Applications

HI151 is an anti-human monoclonal antibody that targets the CD45 antigen. CD45 (also known as Leukocyte Common Antigen (LCA) or PTPRC) is a 180 - 240 kD transmembrane protein that is expressed on the surface of cells like B cells, macrophages, granulocytes and NK cells. CD45 has been associated with essential biological processes like dephosphorylation, specifically protein dephosphorylation. Also, in some organisms, it plays a role in the upregulation of stem cell proliferation, is an inhibitor of cytokine-mediated signaling pathway and enhances hematopoietic stem cell migration. CD45 acts in vital cellular pathways, for example, the B cell receptor signaling pathway, positive regulation of antigen

receptor-mediated signaling pathway and negative regulation of cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like Src kinases. CD45 is a very popular antibody target, with over 50000 publications in the last decade. CD45 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of cell biology and neuroscience. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 594 (ex/em = 566/606 nm). It is compatible with the 561 nm laser and 611/31 nm bandpass filter (for example, as in the Luminex Amnis CellStream).