

PE/iFluor™ 647 Anti-human CD45 Antibody
HI185Catalog number: 104531Q0, 104531Q1, 104531Q2
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	HI185
Conjugate	PE/iFluor™ 647

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 647 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/iFluor™ 647
Excitation Wavelength	569 nm
Emission Wavelength	666 nm

Applications

The HI185 monoclonal antibody reacts with human CD45, a 180 - 240 kD transmembrane glycoprotein often found on the surface of neutrophils, hematopoietic cells, B cells and dendritic cells. CD45 is a component of vital cellular pathways, for example, the T cell receptor signaling pathway, negative regulation of cytokine-mediated signaling pathway and positive regulation of extrinsic apoptotic signaling pathway. Also, in many organisms, it enhances hematopoietic stem cell migration, is a suppressor of cytokine-mediated signaling pathway and enhances protein tyrosine phosphatase activity. CD45 has been thought to be involved with vital biological processes such as dephosphorylation,

especially protein dephosphorylation, and is associated with a variety of biologically interesting macromolecules/ligands, for example, p59fyn and 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, especially in the study of neuroscience. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 647 (ex/em = 569/666 nm). It is compatible with the 561 nm laser and 670/30 nm bandpass filter (for example, as in the BD FACSCelesta™).