PE Anti-human CD45 Antibody *HI73*

Catalog number: 104511L0, 104511L1, 104511L2
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 IgG2a
Immunogen	CD45 (Leukocyte Common Antigen (LCA), T200, PTPRC)
Clone	HI73
Conjugate	PE

Biological Properties

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

Spectral Properties

Conjugate	PE
Excitation Wavelength	566 nm
Emission Wavelength	574 nm

Applications

HI73 is an anti-human monoclonal antibody that recognizes the CD45 antigen. CD45 (also known as PTPRC, Leukocyte common antigen or T200) is a 180 - 240 kD transmembrane glycoprotein that is found on the surface of cells like stem cells, dendritic cells and B cells. CD45 has been associated with important biological processes such as dephosphorylation, especially protein dephosphorylation. Additionally, in certain organisms, it positively regulates tumor necrosis factor production, promotes stem cell proliferation and promotes isotype switching to IgG isotypes. CD45 is involved with key cellular pathways, for example, the B cell receptor signaling pathway, T cell receptor signaling pathway and negative regulation of cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as p56lck, Src kinases and p59fyn. CD45 is a very popular antibody target, with over 50000 publications in

the last decade. CD45 has a variety of applications in cell biology and inhibitory molecules research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to PE (ex/em = 566/574 nm). It is compatible with the 561 nm laser and 585/29 nm bandpass filter (for example, as in the BD FACSJazz™).