iFluor™ 860 Anti-human CD45 Antibody *HI30*

Catalog number: 104500R0, 104500R1
Unit size: 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	HI30
Conjugate	iFluor™ 860

Biological Properties

Appearance	Green liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 860 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 860
Excitation Wavelength	853 nm
Emission Wavelength	878 nm

Applications

The HI30 monoclonal antibody recognizes human CD45, a 180 - 240 kD transmembrane glycoprotein typically found on the surface of B cells, neutrophils, hematopoietic cells and dendritic cells. CD45 is a component of vital cellular pathways, in particular, the regulation of receptor signaling pathway via JAK-STAT, B cell receptor signaling pathway and T cell receptor signaling pathway. Also, in certain organisms, it plays a role

in the downregulation of cytokine-mediated signaling pathway, represses interleukin-2 biosynthetic process and is an enhancer of humoral immune response mediated by circulating immunoglobulin. CD45 has been thought to be involved with critical biological processes such as dephosphorylation, especially protein dephosphorylation, and is associated with a variety of biologically interesting macromolecules/ligands, for instance, p56lck. CD45 is a very popular antibody target, with over 50000 publications in the last decade. CD45 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of neuroscience, immunology and neuroscience cell markers. This antibody was purified through affinity chromatography and conjugated to iFluor™ 860 (ex/em = 853/878 nm).