

**mFluor™ Red 700 Anti-human CD45
Antibody *HI185***Catalog number: 104530V0, 104530V1
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	HI185
Conjugate	mFluor™ Red 700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Red 700
Excitation Wavelength	680 nm
Emission Wavelength	695 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 mFluor™ Red 700 (ex/em = 680/695 nm). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).