

**APC/iFluor™ 700 Anti-human CD45  
Antibody \*HI100\***Catalog number: 104551E0, 104551E1, 104551E2  
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

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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**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG2b, κ
Immunogen	CD45ra (PTPRC)
Clone	HI100
Conjugate	APC/iFluor™ 700

**Biological Properties**

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Preparation	Antibody purified by affinity chromatography and then conjugated with APC/iFluor™ 700 under optimal conditions
Application	Flow Cytometry (FACS)

**Spectral Properties**

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Conjugate	APC/iFluor™ 700
Excitation Wavelength	685 nm
Emission Wavelength	710 nm

**Applications**

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HI100 is an anti-human monoclonal antibody that recognizes the CD45ra antigen. CD45ra (sometimes referred to as LY5, PTPRC, GP180 or LCA) is a 205 - 220 kD glycoprotein that is located on the surface of cells such as T cells and B cells. CD45 has been thought to be involved with essential biological processes like dephosphorylation, particularly protein dephosphorylation. Additionally, in certain organisms, it represses microglial cell activation, is involved in the positive regulation of humoral immune response mediated by circulating immunoglobulin and plays a role in the upregulation of extrinsic apoptotic signaling pathway. CD45 is a member of important cellular pathways, in particular, the cell surface

receptor signaling pathway, positive regulation of antigen receptor-mediated signaling pathway and T cell receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as Src kinases. CD45 is a very popular antibody target, with over 54000 publications in the last decade. CD45ra is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of neuroscience, inhibitory molecules and immunology. This antibody was purified through affinity chromatography and conjugated to APC/iFluor™ 700 (ex/em = 685/710 nm).