

## APC/Cy7 Anti-human CD45 Antibody \*HI185\*

Catalog number: 104531D0, 104531D1, 104531D2 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                    | APC/Cy7                                                                                               |
| <b>Biological Properties</b> |                                                                                                       |
| Preparation                  | Antibody purified by affinity chromatography and then conjugated with APC/Cy7 under optimal condition |
| Application                  | Flow Cytometry (FACS)                                                                                 |
| Spectral Properties          |                                                                                                       |
| Conjugate                    | APC/Cy7                                                                                               |
| Excitation Wavelength        | 754 nm                                                                                                |
| Emission Wavelength          | 779 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 APC/Cy7 (ex/em = 754/779 nm).