

**iFluor™ 810 Anti-human CD45 Antibody**  
**\*HI30\***Catalog number: 10450000, 10450001  
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™ 810                                        |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Green liquid                                                                                               |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 810 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 810 |
| Excitation Wavelength | 811 nm      |
| Emission Wavelength   | 822 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™ 810 (ex/em = 811/822 nm).