

**iFluor™ 594 Anti-human CD45 Antibody**  
**\*HI73\***Catalog number: 104510C0, 104510C1  
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 IgG2a  |
| Immunogen          | CD45 (Leukocyte Common Antigen (LCA), T200, PTPRC) |
| Clone              | HI73   |
| Conjugate          | iFluor™ 594  |

**Biological Properties**

|             |  |
|-------------|--|
| Appearance  | Purple liquid  |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 594 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging  |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 594 |
| Excitation Wavelength | 588 nm      |
| Emission Wavelength   | 604 nm      |

**Applications**

HI73 is an anti-human monoclonal antibody that recognizes the CD45 antigen. CD45 (also known as PTPRC, Leukocyte common antigen or T200) is a 180 - 240 kD transmembrane glycoprotein that is found on the surface of cells like stem cells, dendritic cells and B cells. CD45 has been associated with important biological processes such as dephosphorylation, especially protein dephosphorylation. Additionally, in certain

organisms, it positively regulates tumor necrosis factor production, promotes stem cell proliferation and promotes isotype switching to IgG isotypes. CD45 is involved with key cellular pathways, for example, the B cell receptor signaling pathway, T cell receptor signaling pathway and negative regulation of cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as p56lck, Src kinases and p59fyn. CD45 is a very popular antibody target, with over 50000 publications in the last decade. CD45 has a variety of applications in cell biology and inhibitory molecules research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 594 (ex/em = 588/604 nm). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).