

## Technical Data Sheet

### iF647 Anti-Human CD45

**Catalog Number:** 105407, 105408

**Size:** 25 tests, 100 tests

**Target Name:** CD45, Leukocyte Common Antigen (LCA), T200

**Regulatory Status:** RUO

#### Product Details

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**Clone:** 2D1

**Application:** FC

**Reactivity:** Human

**Format:** iF647

**Isotype:** Mouse IgG1

**Antibody Type:** Monoclonal

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

**Protein Concentration:** Supplied at a lot-specific concentration.

**Storage and Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

**Recommended Usage:** For flow cytometric staining, it is recommended to use 5 µL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

**Excitation Laser:** Red Laser (633 nm)

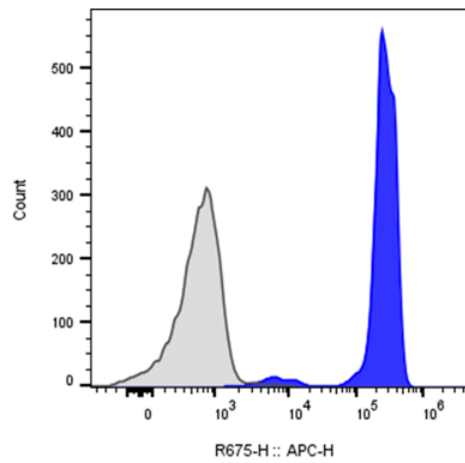
#### Background Information

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CD45 is a 180 - 240 kD single chain type I membrane glycoprotein also known as leukocyte common antigen (LCA) and T200. It is a tyrosine phosphatase expressed on the plasma membrane of all hematopoietic cells, except erythrocytes or platelets. CD45 is a signaling molecule that regulates a variety of cellular processes including cell growth, differentiation, cell cycle, and oncogenic transformation. CD45 plays a critical role in T and B cell antigen receptor-mediated activation by dephosphorylating substrates including p56Lck, p59Fyn, and other Src family kinases. CD45 non-covalently associates with lymphocyte phosphatase-associated phosphoprotein (LPAP) on T and B lymphocytes.

#### Product Data

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Human peripheral blood lymphocytes stained with iF647 anti-human CD45 clone 2D1 (blue histogram) or an isotype control (gray histogram).