

**iFluor™ 450 Anti-human CD2 Antibody**  
**\*RPA-2.10\***Catalog number: 10021040, 10021041  
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                           |
| Immunogen          | CD2 (LFA-2, Erythrocyte R, T11) |
| Clone              | RPA-2.10                        |
| Conjugate          | iFluor™ 450                     |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Brown liquid                                                                                               |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 450 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 450 |
| Excitation Wavelength | 451 nm      |
| Emission Wavelength   | 502 nm      |

**Applications**

RPA-2.10 is an anti-human monoclonal antibody that is specific for the CD2 antigen. CD2 (sometimes referred to as T11, Rosette receptor, Erythrocyte receptor or LFA-2) is a 45 kD single-pass type I membrane protein that is located on the surface of cells such as T cells, B cells and NK cells. In certain organisms, CD2 positively regulates interleukin-8 secretion, enhances myeloid dendritic cell activation and is an enhancer of interferon-gamma secretion. Also, it has been thought to be involved with important biological processes like cell-cell adhesion, specifically heterotypic cell-cell adhesion. CD2 is involved with key cellular pathways, in particular, the cell surface receptor signaling pathway. From a

research standpoint, it is of biological interest due to its association with key macromolecules/ligands like CD48, LFA-3 and CD58. CD2 is a moderately popular antibody target, with over 16000 publications in the last decade. CD2 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of costimulatory molecules and immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 450 (ex/em = 451/502 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ III).