

**mFluor™ Violet 510 Anti-human CD45  
Antibody \*UCHL1\***Catalog number: 10456110, 10456111  
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, κ     |
| Immunogen          | CD45ro (CD45RO)    |
| Clone              | UCHL1              |
| Conjugate          | mFluor™ Violet 510 |

**Biological Properties**

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| Appearance  | Yellow liquid                                                                                                     |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 510 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                       |

**Spectral Properties**

|                       |                    |
|-----------------------|--------------------|
| Conjugate             | mFluor™ Violet 510 |
| Excitation Wavelength | 412 nm             |
| Emission Wavelength   | 505 nm             |

**Applications**

UCHL1 is an anti-human monoclonal antibody that forms an immune complex with the CD45ro antigen. CD45ro (sometimes called CD45RO) is a 180 kD transmembrane glycoprotein that is found on the surface of cells like granulocytes, macrophages and NK cells. In certain organisms, CD45 plays a role in the upregulation of protein kinase activity, is a positive regulator of tumor necrosis factor production and is a negative

regulator of protein kinase activity. Additionally, it has been associated with key biological processes like dephosphorylation, particularly protein dephosphorylation. CD45 acts in key cellular pathways, for example, the regulation of receptor signaling pathway via JAK-STAT, B cell receptor signaling pathway and positive regulation of extrinsic apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like Src kinases, p56lck and p59fyn. CD45 is a very popular antibody target, with over 54000 publications in the last decade. CD45ro is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of inhibitory molecules and immunology. This antibody was purified through affinity chromatography and conjugated to mFluor™ Violet 510 (ex/em = 412/505 nm). It is compatible with the 405 nm laser and 510/50 nm bandpass filter (for example, as in the BD FACSCanto™ II).