

**mFluor™ Violet 540 Anti-human CD44  
Antibody \*HI44a\***Catalog number: 10440120, 10440121  
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          | CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM) |
| Clone              | HI44a                                  |
| Conjugate          | mFluor™ Violet 540                     |

**Biological Properties**

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| Appearance  | Yellow liquid                                                                                                     |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 540 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                       |

**Spectral Properties**

|                       |                    |
|-----------------------|--------------------|
| Conjugate             | mFluor™ Violet 540 |
| Excitation Wavelength | 394 nm             |
| Emission Wavelength   | 537 nm             |

**Applications**

The HI44a monoclonal antibody reacts with human CD44, a 85 kD transmembrane glycoprotein commonly expressed on the surface of leukocytes, endothelial cells, lymphohematopoietic cells, epithelial cells and hepatocytes. In many organisms, CD44 acts to positively regulate peptidyl-tyrosine phosphorylation, enhances peptidyl-serine phosphorylation and is a positive regulator of ERK1 and ERK2 cascade. Also, it acts

in critical cellular pathways, namely, the interferon-gamma-mediated signaling pathway and negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands such as Matrix metalloproteinases (MMPs), Collagen, Osteopontin and Hyaluronan. CD44 is a very popular antibody target, with over 40000 publications in the last decade. CD44 has been widely used in immunology 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 mFluor™ Violet 540 (ex/em = 394/537 nm). It is compatible with the 405 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant Analyzer 16).