

**iFluor™ 488 Anti-human CD44 Antibody**  
**\*HERMES-1\***Catalog number: 10443050, 10443051  
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               | Rat                                    |
| Isotype            | Rat igg2a, κ                           |
| Immunogen          | CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM) |
| Clone              | HERMES-1                               |
| Conjugate          | iFluor™ 488                            |

**Biological Properties**

---

|             |  |
|-------------|--|
| Appearance  | Orange-red liquid  |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 488 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging  |

**Spectral Properties**

---

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 488 |
| Excitation Wavelength | 491 nm      |
| Emission Wavelength   | 516 nm      |

**Applications**

---

HERMES-1 is an anti-human monoclonal antibody that forms an immune complex with the CD44 antigen. CD44 (sometimes called Hermes, H-CAM, ECMR III or PGP-1) is a 85 kD transmembrane glycoprotein that is expressed on the surface of cells like erythrocytes, NK cells and epithelial cells. In many organisms, CD44 is involved in the negative regulation of apoptotic process, upregulates peptidyl-serine

phosphorylation and is a positive regulator of ERK1 and ERK2 cascade. Additionally, it plays a role in vital cellular pathways, for example, the negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator and interferon-gamma-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as Hyaluronan. CD44 is a very popular antibody target, with over 45000 publications in the last decade. CD44 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell biology, immunology and cell adhesion. This antibody was purified through affinity chromatography and conjugated to iFluor™ 488 (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant Analyzer 10).