

**mFluor™ Red 700 Anti-human/mouse CD44  
Antibody \*IM7\***Catalog number: 104410V0, 104410V1  
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, mouse                           |
| Class              | Primary                                |
| Clonality          | Monoclonal                             |
| Host               | Rat                                    |
| Immunogen          | CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM) |
| Clone              | IM7                                    |
| Conjugate          | mFluor™ Red 700                        |

**Biological Properties**

|             |                                                                                                                |
|-------------|----------------------------------------------------------------------------------------------------------------|
| Appearance  | Dark blue liquid                                                                                               |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 700 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                    |

**Spectral Properties**

|                       |                 |
|-----------------------|-----------------|
| Conjugate             | mFluor™ Red 700 |
| Excitation Wavelength | 680 nm          |
| Emission Wavelength   | 695 nm          |

**Applications**

IM7 is an anti-human/mouse monoclonal antibody that targets the CD44 antigen. CD44 (sometimes referred to as Epican, H-CAM, PGP-1 or ECMR III) is a 85 kD glycoprotein that is found on the surface of cells like NK cells, endothelial cells and macrophages. CD44 is involved with key cellular pathways, in particular, the negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator and interferon-gamma-mediated signaling pathway. Moreover, in some organisms, it upregulates peptidyl-tyrosine phosphorylation, plays a role in the upregulation of ERK1 and ERK2 cascade and is a positive regulator of peptidyl-serine phosphorylation. From a research

standpoint, it is of biological interest due to its association with vital macromolecules/ligands like MIP1 $\beta$ , Ankyrin, Collagen and Osteopontin. CD44 is a very popular antibody target, with over 40000 publications in the last decade. CD44 is vital to cell adhesion, cell biology and immunology research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to mFluor™ Red 700 (ex/em = 680/695 nm). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).