

**mFluor™ Violet 540 Anti-human/mouse
CD44 Antibody *IM7***Catalog number: 10441120, 10441121
Unit size: 100 tests, 500 tests**Product Details**

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| 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

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| Species Reactivity | Human, mouse |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Rat |
| Immunogen | CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM) |
| Clone | IM7 |
| Conjugate | mFluor™ Violet 540 |

Biological Properties

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| 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

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| Conjugate | mFluor™ Violet 540 |
| Excitation Wavelength | 394 nm |
| Emission Wavelength | 537 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 β , 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™ 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 VYB).