

iFluor™ 405 Anti-human CD44 Antibody
HI44aCatalog number: 10440020, 10440021
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 |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse IgG2a |
| Immunogen | CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM) |
| Clone | HI44a |
| Conjugate | iFluor™ 405 |

Biological Properties

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|-------------|--|
| Appearance | Light yellow liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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|-----------------------|-------------|
| Conjugate | iFluor™ 405 |
| Excitation Wavelength | 403 nm |
| Emission Wavelength | 427 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 iFluor™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 450/50 nm bandpass filter (for example, as in the Beckman Coulter Navios EX).