

**iFluor™ 450 Anti-human CD44 Antibody**  
**\*HI44a\***Catalog number: 10440040, 10440041  
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	iFluor™ 450

**Biological Properties**

Appearance	Brown liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 450 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

Conjugate	iFluor™ 450
Excitation Wavelength	451 nm
Emission Wavelength	502 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™ 450 (ex/em = 451/502 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ III).