

PE/Cy7 Anti-human CD44 Antibody *HI44a*

Catalog number: 104401N0, 104401N1, 104401N2

Unit size: 25 tests, 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	PE/Cy7

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/Cy7 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/Cy7
Excitation Wavelength	566 nm
Emission Wavelength	778 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 PE/Cy7 (ex/em = 566/778 nm). It is compatible with the 561 nm laser and 780/60 nm bandpass filter (for example, as in the BD FACSCelesta™).