

iFluor™ 450 Anti-human CD44 Antibody
HERMES-1Catalog number: 10443040, 10443041
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	Rat
Isotype	Rat igg2a, κ
Immunogen	CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM)
Clone	HERMES-1
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

HERMES-1 is an anti-human monoclonal antibody that forms an immune complex with the CD44 antigen. CD44 (sometimes called Hermes, H-CAM, ECMR III or PGP-1) is a 85 kD transmembrane glycoprotein that is expressed on the surface of cells like erythrocytes, NK cells and epithelial cells. In many organisms, CD44 is involved in the negative regulation of apoptotic process, upregulates peptidyl-serine

phosphorylation and is a positive regulator of ERK1 and ERK2 cascade. Additionally, it plays a role in vital cellular pathways, for example, the negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator and interferon-gamma-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as Hyaluronan. CD44 is a very popular antibody target, with over 45000 publications in the last decade. CD44 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell biology, immunology and cell adhesion. 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).