

**PacOrange Anti-human CD44 Antibody**  
**\*HERMES-1\***Catalog number: 104431K0, 104431K1  
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	PacOrange

**Biological Properties**

Preparation	Antibody purified by affinity chromatography and then conjugated with PacOrange under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

Conjugate	PacOrange
Excitation Wavelength	400 nm
Emission Wavelength	551 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 PacOrange (ex/em = 400/551 nm). It is compatible with the 405 nm laser and 550/40 nm bandpass filter (for example, as in the Beckman Coulter Navios EX).