

PacOrange Anti-human CD47 Antibody
HI172Catalog number: 104711K0, 104711K1
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 IgG1
Immunogen	CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein)
Clone	HI172
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

HI172 is an anti-human monoclonal antibody that is specific for the CD47 antigen. CD47 (sometimes called Integrin associated protein) is a 42 - 52 kD multi-pass membrane protein that is found on the surface of cells such as granulocytes, platelets, endothelial cells and B cells. CD47 acts in critical cellular pathways, in particular, the negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis and integrin-mediated signaling pathway. In addition, in certain organisms, it downregulates Fc-gamma receptor signaling pathway involved in phagocytosis, upregulates T cell activation and acts to positively regulate inflammatory response. From a research standpoint, it is of biological interest due to

its association with key macromolecules/ligands like SIRP, Thrombospondin and CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology. 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 525/50 nm bandpass filter (for example, as in the BD LSRFortessa™ Cell Analyzer).