

FITC Anti-human CD47 Antibody *HI172*Catalog number: 104711H0, 104711H1
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	FITC

Biological Properties

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

Spectral Properties

Conjugate	FITC
Excitation Wavelength	491 nm
Emission Wavelength	516 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 FITC (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 530/30 nm bandpass filter (for example, as in the BD FACSAria™ II).