iFluor™ 514 Anti-human CD47 Antibody *HI172*

Catalog number: 10471060, 10471061
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	iFluor™ 514

Biological Properties

Appearance	Orange-red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 514 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 514
Excitation Wavelength	528 nm
Emission Wavelength	555 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 iFluor™ 514 (ex/em = 528/555 nm). It is compatible with the 532 nm laser and 575/25 nm bandpass filter (for example, as in the BD Special Order LSRFortessa™ Cell Analyzer).