iFluor™ 488 Anti-human CD47 Antibody *HIRH47*

Catalog number: 10470050, 10470051
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	HIRH47
Conjugate	iFluor™ 488

Biological Properties

Appearance	Orange-red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 488
Excitation Wavelength	491 nm
Emission Wavelength	516 nm

Applications

HIRH47 is an anti-human monoclonal antibody that targets the CD47 antigen. CD47 (sometimes referred to as MER6, Integrin associated protein or Rh-associated protein) is a 42 - 52 kD multi-pass membrane protein that is found on the surface of cells like T cells. In some organisms, CD47 upregulates cell population proliferation, acts to positively regulate phagocytosis and is involved in the positive regulation of stress fiber

assembly. In addition, it is a component of key cellular pathways, namely, the integrin-mediated signaling pathway and negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis. From a research standpoint, it is of biological interest due to its association with vital 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™ 488 (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant X).