

**PE Anti-mouse/human/rat CD47 Antibody**  
**\*MIAP410\***Catalog number: 104731M0, 104731M1, 104731M2  
Unit size: 25 tests, 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	Mouse, human, rat
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse igg1, $\kappa$
Immunogen	CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein)
Clone	MIAP410
Conjugate	PE

**Biological Properties**

Preparation	Antibody purified by affinity chromatography and then conjugated with PE under optimal conditions
Application	Flow Cytometry (FACS)

**Spectral Properties**

Conjugate	PE
Excitation Wavelength	566 nm
Emission Wavelength	574 nm

**Applications**

The MIAP410 monoclonal antibody binds with mouse/human/rat CD47, a 42 - 52 kD transmembrane protein frequently located on the surface of b cells, thymocytes and epithelial cells. In many organisms, CD47 acts to positively regulate phagocytosis, is a promoter of cell population proliferation and enhances T cell activation. Also, it is involved with vital cellular pathways, for instance, the negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis and integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands like Thrombospondin, SIRP and CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 has a variety of applications in immunology research, often

serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to PE (ex/em = 566/574 nm). It is compatible with the 561 nm laser and 586/15 nm bandpass filter (for example, as in the BD FACSCelesta™).