

**mFluor™ Violet 540 Anti-mouse/human/rat
CD47 Antibody *MIAP410***Catalog number: 10473120, 10473121
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	Mouse, human, rat
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse igg1, κ
Immunogen	CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein)
Clone	MIAP410
Conjugate	mFluor™ Violet 540

Biological Properties

Appearance	Yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 540 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Violet 540
Excitation Wavelength	394 nm
Emission Wavelength	537 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 mFluor™ Violet 540 (ex/em = 394/537 nm). It is compatible with the 405 nm laser and 510/50 nm bandpass filter (for example, as in the BD FACSCanto™ II).