

mFluor™ Blue 570 Anti-mouse/human/rat CD47 Antibody *MIAP410*

Catalog number: 104730T0, 104730T1

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™ Blue 570

Biological Properties

Appearance Red liquid

Preparation Antibody purified by affinity chromatography and then conjugated with mFluor™ Blue 570

under optimal conditions

Application Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate mFluor™ Blue 570

Excitation Wavelength 553 nm

Emission Wavelength 565 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™ Blue 570 (ex/em = 553/565 nm). It is compatible with the 561 nm laser and 582/15 nm bandpass filter (for example, as in the BD FACSAria™ III).