

**XFD680 Anti-mouse/human/rat CD47
Antibody *MIAP410, XFD680 Same
Structure to Alexa Fluor™ 680***Catalog number: 10473190, 10473191
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	AF680

Biological Properties

Appearance	liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 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 XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 680 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).