XFD750 Anti-human CD47 Antibody *B6.H12*

Catalog Number: 104721B0, 104721B1
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	Lot specific (please consult certificate of analysis for given lot)
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, κ
Immunogen	CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein)
Clone	B6.H12
Conjugate	AF750

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF750 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. **The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.*

Spectral Properties

Conjugate	AF750
Excitation Wavelength	752 nm
Emission Wavelength	776 nm

Applications

B6.H12 is an anti-human monoclonal antibody that is specific for the CD47 antigen. CD47 (sometimes called MER6, Integrin associated protein or integrin-associated protein) is a 42 - 52 kD multi-pass membrane protein that is located on the surface of cells like T cells, erythrocytes, epithelial cells and endothelial cells. CD47 acts in essential cellular pathways, for instance, the negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis and integrin-mediated signaling pathway. Also, in some organisms, it is involved in the positive regulation of stress fiber assembly, is a promoter of T cell activation and positively regulates phagocytosis. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 is frequently 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 XFD750 (ex/em = 752/776 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).