

**PE/XFD700 Anti-dog/ chicken/ rabbit/
guinea pig/ horse/ cow/ mouse/ rat/ pig/
non-human primates/ human CD79a
Antibody *HM47, XFD700 Same Structure to
Alexa Fluor™ 700***

Catalog number: 107901Q0, 107901Q1, 107901Q2
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	Dog, chicken, rabbit, guinea pig, horse, cow, mouse, rat, pig, non-human primates, human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1 kappa
Immunogen	CD79a (Mb-1, IGA)
Clone	HM47
Conjugate	PE/AF700

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/AF700
Excitation Wavelength	566 nm
Emission Wavelength	721 nm

Applications

HM47 is an anti-dog/ chicken/ rabbit/ guinea pig/ horse/ cow/ mouse/ rat/ pig/ non-human primates/ human monoclonal antibody that forms an immune complex with the CD79a antigen. CD79a (sometimes referred to as Mb-1 or IGA) is a 47 kD single-pass type I membrane protein that

is expressed on the surface of cells such as B cells. CD79a is a component of essential cellular pathways, in particular, the B cell receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands like CD22, CD79b, CD5 and CD19. CD79a is a fairly uncommon antibody target, with a little more than 4100 publications in the last decade. Even still, CD79a has been widely used in immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 700 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 561 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).