

CD47 Recombinant Monoclonal Mouse Antibody (rB6H12) - Biotium Choice

A recombinant mouse monoclonal antibody that recognizes CD47 protein. The antibody belongs to the Biotium Choice list of select antibodies that have been validated in-house for optimal performance.

Product Description

CD47 Recombinant Monoclonal Mouse Antibody (rB6H12) recognizes human and mouse CD47, also known as integrin-associated protein (IAP), a glycosylated transmembrane protein widely expressed across hematopoietic cells. This antibody belongs to the Biotium Choice list of select antibodies that have been validated and optimized in-house for fluorescence microscopy and flow cytometry. The antibody is available conjugated to a selection of CF® Dyes. They are supplied in PBS, 2 mg/mL rBSA, and 0.05% sodium azide.

- Available in bright and photostable CF® Dyes, including [near-IR CF®740 and CF®790](#)
- Suitable for immunofluorescence, flow cytometry, immunoprecipitation, western blot, and functional studies

CD47 is a glycoprotein with five transmembrane regions and a short cytoplasmic tail that undergoes alternative splicing. It contributes to cell adhesion via binding to SIRP (signal regulator protein) and forms non-covalent complexes with the beta3 integrins CD51/CD61 and CD41/CD61. These associations can drive bi-directional signaling that alters neural synaptic function and controls macrophage phagocytosis. CD47 also serves as a receptor for thrombospondin. When expressed on T cells, CD47 can trigger either activation or apoptosis, the latter occurring when thrombospondin levels are elevated. More recent work has demonstrated that engaging CD47 with a monoclonal antibody induces suppressive activity in CD4+CD25- cells along with upregulation of Foxp3. CD47 is broadly expressed across most hematopoietic lineages, including T cells, B cells, monocytes, platelets, and erythrocytes (where it forms part of the Rh complex), and is additionally present on non-hematopoietic cell types.

Discover Sharper Signals and Unmatched Panel Flexibility with Biotium Choice Antibodies - Powered by CF® Dyes

Biotium Choice antibodies are carefully curated and validated in-house to offer exceptional signal-to-noise. Labeled with our advanced CF® Dyes, they are our top-recommended antibodies for immunofluorescence, flow cytometry, and other applications.

Biotium Choice Antibody Features

- Robust and validated clones against common targets
- Developed and optimized for immunofluorescence, flow cytometry, and other applications
- Conjugated to bright, photostable [CF® Dyes](#) for superior signal and clarity
- New antibody clones and dye conjugates continuously in development

[View our full catalog of Biotium Choice antibodies](#)

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Conjugation	Ex/Em	Conc.	Size	Catalog No.	Dye Features
CF@405M	416/452 nm	100 ug/mL	500 uL	P062-405M-500UL	CF@4805M Features
CF@488A	490/516 nm	100 ug/mL	500 uL	P062-488A-500UL	CF@488A Features
CF@568	562/584 nm	100 ug/mL	500 uL	P062-568-500UL	CF@568 Features
CF@594	593/615 nm	100 ug/mL	500 uL	P062-594-500UL	CF@594 Features
CF@640R	642/663 nm	100 ug/mL	500 uL	P062-640R-500UL	CF@640R Features
CF@647	652/668 nm	100 ug/mL	500 uL	P062-647-500UL	CF@647 Features
CF@680R	680/701 nm	100 ug/mL	500 uL	P062-680R-500UL	CF@680R Features
CF@740	742/767 nm	100 ug/mL	500 uL	P062-740-500UL	CF@740 Features
CF@790	783/808 nm	100 ug/mL	500 uL	P062-790-500UL	CF@790 Features



Call us : [800-304-5357](tel:800-304-5357)

Product attributes

Antibody number	P062
Antibody reactivity (target)	CD47
Biotium Choice Antibody	Primary
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal, Recombinant Monoclonal
Clone	rB6H12
Isotype	IgG1, kappa
Molecular weight	~50 kDa
Synonyms	Antigenic Surface Determinant Protein OA3; IAP; Integrin Associated Protein; Integrin Associated Signal Transducer; MER6; OA3; Protein MER6; Rh Related Antigen
SwissProt	Q08722
Antibody target cellular localization	Exosomes/EVs, Plasma membrane
Verified antibody applications	IF (verified), Flow (surface) (verified)
Species reactivity	Human, Mouse
Expected antibody applications	Functional studies (published for clone), IP (published for clone), WB (published for clone)
Antibody application notes	Immunofluorescence: 0.1 ug/mL; Optimal concentration to be determined by end-user., Recommended concentration for flow cytometry: 5 ug/mL
Positive control	Human peripheral blood mononuclear cells (PBMCs), HUVEC, OVCA3 cells, Placenta, Brain and Ovarian Tumors, MCF-7
Shipping condition	Room temperature
Storage Conditions	Protect from light, Protect fluorescent conjugates from light
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Product origin	Recombinant BSA produced in Chinese hamster ovary cells, Recombinant mouse IgG produced in Chinese Hamster Ovary (CHO) cell line
Antibody/conjugate formulation	CF® Dye Conjugates: PBS/2 mg/mL rBSA/ 0.05% sodium azide
Antibody research areas	Cell adhesion, Exosomes/EVs, Immunology, Neuroscience, Signal transduction

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