

# CD47 Monoclonal Antibody (B6H12), APC, eBioscience™

<b>Product Details</b>	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	B6H12
Conjugate	APC
Excitation/Emission Max	651/660 nm
Form	Liquid
Concentration	5 μL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1963586

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μL (1 μg)/test	13 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

#### **Product Specific Information**

Description: The monoclonal antibody B6H12 reacts to CD47 also known as integrin-associated protein (IAP), and neurophilin. CD47 is a glycosylated five transmembrane protein with a small alternatively spliced cytoplasmic domain. CD47 is involved in adhesion through interactions with SIRP (signal regulator protein) and is non-covalently associated with beta3 integrins CD51 /CD61 and CD41/CD61. Furthermore this interaction can mediate bi-directional signaling to modify neural synaptic activity and regulate the phagocytic activities of macrophages. CD47 is the receptor for thrombospondin. T cell expression of CD47 can mediate activation or apoptosis (in the presence of high levels of thrombospondin). Recently stimulation of CD47 by monoclonal antibody has been shown to induce CD4+CD25- suppressive activity also increasing expression of Foxp3. Expression is found in the majority of hematopoietic cells including T and B cells, monocytes, platelets and erythrocytes (as part of the Rh complex). Expression is also found in non-hematopoietic cells.

This antibody has been reported to have neutralizing activity.

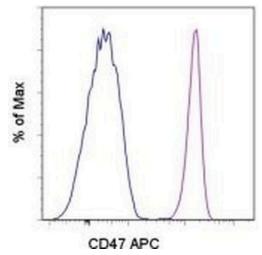
Applications Reported: This B6H12 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This B6H12 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (1 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 μL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells /test.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

# Product Images For CD47 Monoclonal Antibody (B6H12), APC, eBioscience™



# CD47 Antibody (17-0479-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control APC (Product # 17-4714-81) (blue histogram) or Anti-Human CD47 APC (purple histogram). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

#### **□ 14 References**

#### Flow Cytometry (13)

Pharmaceuticals (Basel, Switzerland)

Altered Membrane Expression and Function of CD11b Play a Role in the Immunosuppressive Effects of Morphine on Macrophages at the Nanomolar Level.

**Year** 2023

"Published figure using CD47 monoclonal antibody (Product # 17-0479-42) in Flow Cytometry" Authors: Yu PC,Hao CY,Fan YZ,Liu D,Qiao YF,Yao JB,Li CZ,Yu Y

#### Oncoimmunology

#### Schweinfurthin induces ICD without ER stress and caspase activation.

"Published figure using CD47 monoclonal antibody (Product # 17-0479-42) in Flow Cytometry" Authors: Zhang R,Neighbors JD,Schell TD,Hohl RJ

**Year** 2022

View more Flow references on thermofisher.com

### Miscellaneous PubMed (1)

#### **Theranostics**

# Co-delivery of phagocytosis checkpoint and STING agonist by a Trojan horse nanocapsule for orthotopic glioma immunotherapy.

"17-0479-42 was used in Preparation of nanocapsules to develop a smart "Trojan horse" BBB-permeable nanocapsule termed "NAcp@CD47" to deliver anti-CD47 antibodies and stimulator of interferon genes (STING) agonists into GBM tissues in a stealth-like manner to reshaped the immune microenvironment by switching the phenotype of microglia and macrophages."

Authors: Zhou Y,Guo Y,Chen L,Zhang X,Wu W,Yang Z,Li X,Wang Y,Hu Z,Wang Z

**Year** 2022

Species Mouse

# More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation specifications and/or accompanying package inserts ("Documentation"), No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is imited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PUPROSE, OR NON INFRINGENENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.