



# CD47 Monoclonal Antibody (B6H12), eBioscience™

<b>Product Details</b>	
Size	100 μg
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Туре	Antibody
Clone	B6H12
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_837143

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	1 Publication
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	1 μg/test	14 Publications
Flow Cytometry (Flow)  Immunoprecipitation (IP)	1 μg/test Assay-Dependent	14 Publications
Immunoprecipitation (IP)	Assay-Dependent	-

#### **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, immunoprecipitation,

western blotting, and immunohistochemical staining of formalin-fixed paraffin embedded tissue sections.

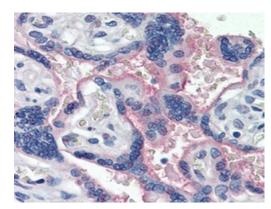
Applications Tested: This B6H12 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. The B6H12 antibody has been tested by immunohistochemistry of formalin-fixed paraffin embedded human tissue using low pH antigen retreival and can be used at less than or equal to 40  $\mu$ g/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

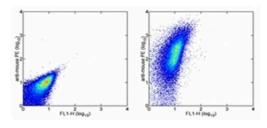
Filtration: 0.2 µm post-manufacturing filtered.

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



#### CD47 Antibody (14-0479-82) in IHC (P)

Immunohistochemistry of formalin-fixed paraffin embedded human placenta stained with 40  $\mu$ g/mL Anti-Human CD47 Purified followed by Anti-Mouse IgG Biotin, Streptavidin Alkaline Phosphatase, and Fast Red. Nuclei are counterstained with hematoxylin.



# CD47 Antibody (14-0479-82) in Flow

Staining of normal human peripheral blood cells with 0.5  $\mu$ g of Mouse IgG1 kappa Isotype Control Purified (Product # 14-4714-82) (left) or 0.5  $\mu$ g of Anti-Human CD47 Purified (center) followed by F (ab')2 Anti-Mouse IgG PE (Product # 12-4012). Lymphocytes were used for analysis.

### View more figures on thermofisher.cn

#### **□ 25 References**

# Western Blot (1)

Nature

Nanoparticle biointerfacing by platelet membrane cloaking.

"14-0479 was used in Flow cytometry/Cell sorting to explore the use of the preparation of polymeric nanoparticles enclosed in the plasma membrane of human platelets."

Authors: Hu CM,Fang RH,Wang KC,Luk BT,Thamphiwatana S,Dehaini D,Nguyen P,Angsantikul P,Wen CH,Kroll AV, Carpenter C,Ramesh M,Qu V,Patel SH,Zhu J,Shi W,Hofman FM,Chen TC,Gao W,Zhang K,Chien S,Zhang L

**Year** 2015

Species Human

Immunohistochemistry (3)

JCI insight

CD47 prevents the elimination of diseased fibroblasts in scleroderma.

"Published figure using CD47 monoclonal antibody (Product # 14-0479-82) in Immunocytochemistry"

Authors: Lerbs T,Cui L,King ME,Chai T,Muscat C,Chung L,Brown R,Rieger K,Shibata T,Wernig G

**Year** 2020

Species Mouse

Nature communications

Therapeutic modulation of phagocytosis in glioblastoma can activate both innate and adaptive antitumour immunity.

"Published figure using CD47 monoclonal antibody (Product # 14-0479-82) in Immunohistochemistry"

Authors: von Roemeling CA,Wang Y,Qie Y,Yuan H,Zhao H,Liu X,Yang Z,Yang M,Deng W,Bruno KA,Chan CK,Lee AS, Rosenfeld SS,Yun K,Johnson AJ,Mitchell DA,Jiang W,Kim BYS

**Year** 2020

Species Human

Dilution 1:50

View more IHC references on thermofisher.cn

Immunocytochemistry (2)

JCI insight

CD47 prevents the elimination of diseased fibroblasts in scleroderma.

"Published figure using CD47 monoclonal antibody (Product # 14-0479-82) in Immunocytochemistry"

Authors: Lerbs T,Cui L,King ME,Chai T,Muscat C,Chung L,Brown R,Rieger K,Shibata T,Wernig G

**Year** 2020

Species Mouse

More applications with references on thermofisher.cn

Flow (14)

Neu (2)

IA (2)

Misc (1)

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 of specifications specifications and/or accompanying package inserts ("Documentation"), No claim of situatibility 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 limited 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 mode of sample in smerely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample in the Product is intended to sample in the Buyer. Any model or sample in the Product 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 in the Product 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 in the Product 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 in the Product 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 in the Product is merely illustrative. The Product is merely illustrative of the general type and quality of goods and does not represent that any Product is intended for research of the Product is intended to 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, or why or in vito therapeutic uses, or any ty