

Spark PLUS UV395™ anti-human CD47 Antibody

Catalog# / Size	323138 / 25 tests
Clone	CC2C6
Regulatory Status	RUO
Other Names	Rh-associated protein, gp42, integrin-associated protein, IAP, neurophilin
Isotype	Mouse IgG1, κ
Description	CD47 also known as Rh-associated protein, gp42, integrin-associated protein (IAP), and neurophilin, is a 42-52 kD member of the immunoglobulin superfamily containing a five-pass transmembrane attachment. Two splice variants have been described in the cytoplasmic tail, the shorter form is expressed in bone-marrow-derived cells, endothelial cells, and fibroblasts while the longer form is expressed by neural tissues. CD47 expression is widely distributed in hematopoietic cells including thymocytes, T cells, B cells, monocytes, platelets, and erythrocytes as well as epithelial cells, endothelial cells, fibroblasts, and neural tissues. CD47 functions as an adhesion molecule and thrombospondin receptor and is non-covalently associated with $\beta 3$ integrins CD51/CD61, CD41/CD61. Thrombospondin is a ligand for CD47; in the absence of CD47 mice show defects in host defense and $\beta 3$ integrin-dependent ligand binding, migration, and cellular activation. CD47 is also part of the Rh complex on erythrocytes. The CC2C6 antibody recognizes human CD47 and has been shown to be useful for flow cytometry.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	CCRF-CEM T-cell line
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark PLUS UV395™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark PLUS UV395™ has a maximum excitation of 355 nm and a maximum emission of 385 nm.
Excitation Laser	Ultraviolet Laser (355 nm)
Application Notes	The CC2C6 monoclonal antibody can block the binding of HCD47 antibody to CD47. Additional reported applications (for the relevant formats) include: blocking ²

Application References

(PubMed link indicates
BioLegend citation)

1. Seiffert M, *et al.* 1999. *Blood* 94:3633.
2. Leclair P, *et al.* 2018. *Cell Death Dis.* 5:544 (Block)

RRID

AB_3717223 (BioLegend Cat. No. 323138)

Antigen Details

Structure

Member of the immunoglobulin superfamily, 42-52 kD protein with a five-pass transmembrane attachment. Two splice variants have been described in the cytoplasmic tail.

Distribution

Wide distribution in hematopoietic cells including thymocytes, T cells, B cells, platelets, and erythrocytes as well as epithelial cells, endothelial cells, fibroblasts, and neural tissues.

Function

Adhesion molecule and thrombospondin receptor. In the absence of CD47, mice show defects in host defense and beta 3 integrin-dependent ligand binding, migration, and cellular activation. CD47 is a part of the Rh complex on erythrocytes.

Ligand/Receptor

Non-covalently associated with $\beta 3$ integrins CD51/CD61, CD41/CD61. Thrombospondin is a ligand for CD47.

Cell Type

B cells, Endothelial cells, Epithelial cells, Erythrocytes, Fibroblasts, Platelets, T cells, Thymocytes

Biology Area

Immunology

Molecular Family

CD Molecules

Antigen References

1. Anstee DJ, *et al.* 1995. In *Leucocyte Typing V* (Schlossman ed.) Oxford University Press Oxford pp233-234.
2. Brown E, *et al.* 1990. *J. Cell Biol.* 111:2785.
3. Gao AG, *et al.* 1996. *J. Biol. Chem.* 271:21.
4. Lindberg FP, *et al.* 1994. *J. Biol. Chem.* 269:1567.

Gene ID

[961](#)

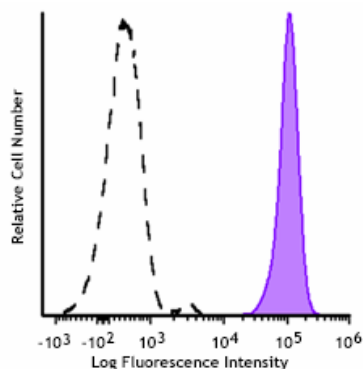
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

TotalSeq™-B0026 anti-human CD47 Antibody, TotalSeq™-D0026 anti-human CD47, PE/Cyanine7 anti-human CD47, Alexa Fluor® 700 anti-human CD47, APC/Fire™ 750 anti-human CD47, Pacific Blue™ anti-human CD47, Spark PLUS UV395™ anti-human CD47, Purified anti-human CD47, Biotin anti-human CD47, FITC anti-human CD47, PE anti-human CD47, PerCP/Cyanine5.5 anti-human CD47, TotalSeq™-A0026 anti-human CD47, TotalSeq™-C0026 anti-human CD47, PE/Dazzle™ 594 anti-human CD47 Antibody, Alexa Fluor® 647 anti-human CD47, APC anti-human CD47, Brilliant Violet 421™ anti-human CD47, Brilliant Violet 605™ anti-human CD47, Spark PLUS B550™ anti-human CD47 (Flexi-Fluor™)

Product Data



Human peripheral blood monocytes were stained with anti-human CD47 (clone CC2C6) Spark PLUS UV395™ (filled histogram) or mouse IgG1, κ Spark PLUS UV395™ isotype control (open histogram).

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