

APC/Fire™ 750 anti-human CD47

Catalog # / Size: 2215610 / 100 tests
2215605 / 25 tests

Clone: CC2C6

Isotype: Mouse IgG1, κ

Immunogen: CCRF-CEM T-cell line

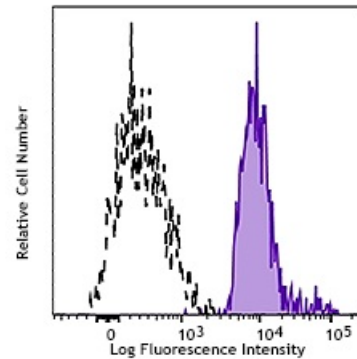
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: VI B051

Concentration: Lot-specific



Human peripheral blood monocytes were stained with CD47 (clone CC2C6) APC/Fire™ 750 (filled histogram) or mouse IgG1, κ APC/Fire™ 750 isotype control (open histogram).

Applications:

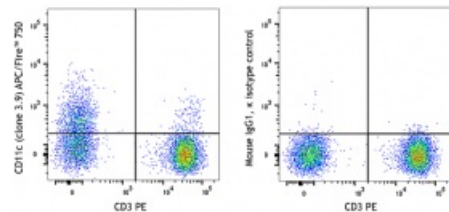
Applications: Flow Cytometry

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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

Application Notes: The CC2C6 monoclonal antibody can block the binding of HCD47 antibody to CD47.

Additional reported applications (for the relevant formats) include: blocking²

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



Human peripheral blood lymphocytes were stained with PE anti-human CD3 and APC/Fire™ 750 anti-human CD11c (clone 3.9) (left) or mouse IgG1, κ APC/Fire™ 750 isotype control (right).

Description: CD47 also known as Rh-associated protein, gp42, integrin-associated protein (IAP), and neuropilin, 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.

- 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.