

**Brilliant Violet 605™ anti-human CD47**

**Catalog # / Size:** 2215600 / 100 tests  
2215595 / 25 tests

**Clone:** CC2C6

**Isotype:** Mouse IgG1,  $\kappa$

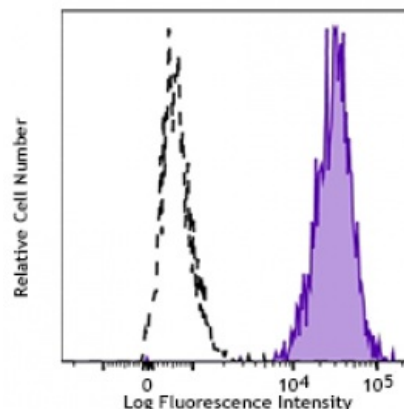
**Immunogen:** CCRF-CEM T-cell line

**Reactivity:** Human, Non-human primate

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.

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

**Concentration:** Lot-specific



Human peripheral blood monocytes were stained with CD47 (clone CC2C6) Brilliant Violet 605™ (filled histogram) or mouse IgG1,  $\kappa$  Brilliant Violet 605™ 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  $\mu$ l per million cells or 5  $\mu$ l per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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

**Application 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.* 2

**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.

**Antigen** 1. Anstee DJ, *et al.* 1995. In Leucocyte Typing V (Schlossman ed.) Oxford  
**References:** 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.* 2