

**Brilliant Violet 421™ anti-human CD47**

**Catalog # / Size:** 2215575 / 25 tests  
2215580 / 100 tests

**Clone:** CC2C6

**Isotype:** Mouse IgG1, κ

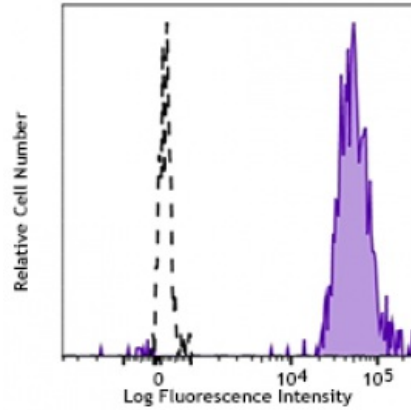
**Immunogen:** CCRF-CEM T-cell line

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

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ 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 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ 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 or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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 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.* 2