## **Product Data Sheet**

## **Purified anti-human CD47**

**Catalog # / Size:** 2215510 / 100 μg

Clone: CC2C6

**Isotype:** Mouse IgG1, κ

Immunogen: CCRF-CEM T-cell line

Reactivity: Human

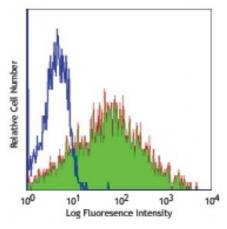
**Preparation:** The antibody was purified by affinity

chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



Human peripheral blood lymphocytes stained with purified CC2C6, followed by anti-mouse IgGs

## **Applications:**

**Applications:** Flow Cytometry

Recommended

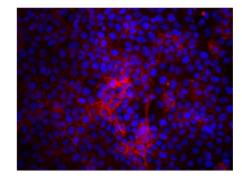
**Usage:** 

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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes:

The CC2C6 monoclonal antibody can block the binding of HCD47 antibody to

CD47.



MCF-7 breast cancer cell line was stained with anti-human CD47, detected with anti-mouse DyLight™ 649, and nuclear counterstained with DAPI. Images were acquired with a TE300 fluorescence microscope with a 20x objective. Data provided by: Er Liu and

Application References:

1. Seiffert M, et al. 1999. Blood 94:3633.

**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 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