

**Pacific Blue™ anti-human CD41**

**Catalog # / Size:** 2118570 / 100 tests  
2118565 / 25 tests

**Clone:** HIP8

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

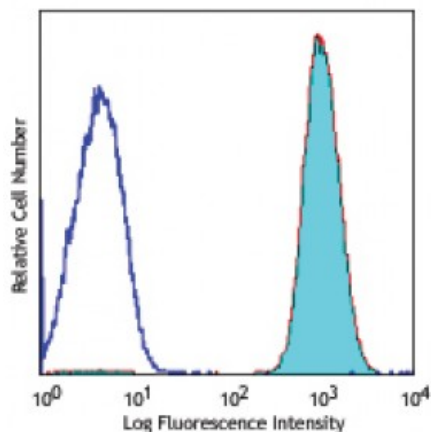
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

**Workshop Number:** IV P38

**Concentration:** Lot-specific



Human peripheral blood platelets were stained with CD41 (clone HIP8) Pacific Blue™ (filled histogram) or mouse IgG1,  $\kappa$  Pacific Blue™ 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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections and blocking of platelet aggregation<sup>2</sup>. The HIP8 antibody has been reported to block the activation of platelets by various stimuli, including collagen, and ADP.

**Application References:**

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. McCarty OJT, *et al.* 2000. *Blood* 96:1789.
3. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
4. Onasoga-Jarvis AA, *et al.* 2013. *PLoS One*. 13:78732. [PubMed](#)

**Description:** CD41 is a 125/25 kD  $\alpha$  subunit of the gpIIb/IIIa (CD41/CD61) complex. CD41 is a heterodimer composed of a heavy chain (gpIIb $\alpha$ ) and light chain (gpIIb $\beta$ ) linked by a single disulfide bond. It is a member of the integrin family primarily expressed on platelets and megakaryocytes. CD41 has been reported to be involved with platelet aggregation and platelet attachment to the ECM. CD41/CD61 complex acts as the receptor for fibrinogen, fibronectin, Von Willebrand factor, and thrombin.

**Antigen References:**

1. Denzin L, *et al.* 1996. *J. Exp. Med.* 184:2153.
2. Denzin L, *et al.* 1995. *Cell* 82:155.
3. Riberdy J, *et al.* 1994. *J. Cell Biol.* 125:1225.

