

FITC anti-human CD41/CD61

Catalog # / Size: 2399050 / 100 tests
2399045 / 25 tests

Clone: A2A9/6

Isotype: Mouse IgG2a, κ

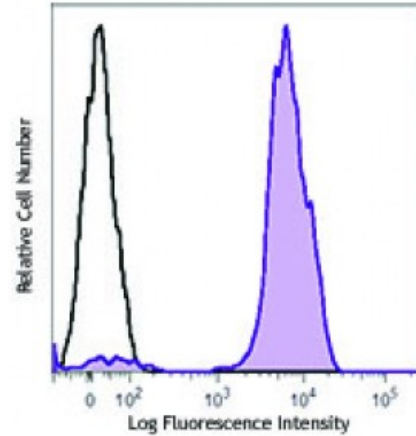
Immunogen: Human platelets

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC and unconjugated antibody.

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

Concentration: Lot-specific



Human platelets were stained with anti-human CD41/CD61 (clone A2A9/6) FITC (filled histogram), or mouse IgG2a, κ isotype control FITC (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.

Application Notes: Additional reported applications (for relevant formats) include: immunoprecipitation¹ and blocking (aggregation)². The Ultra-LEAF™ purified antibody (Endotoxin <0.01 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 359804).

A2A9/6 is recognized as having high affinity to gpIIb/IIIa. It has been shown to inhibit platelet aggregation induced by a variety of agonists and the initiation of clot formation.

Application References: 1. Basani RB, *et al.* 1996. *Blood*. 88:167. (IP)
2. Bennett JS, *et al.* 1983. *Proc. Natl. Acad. Sci. USA*. 80:2417. (Block)

Description: CD41/CD61, also known as gpIIb/IIIa, is a member of a family integrin receptors. This is a complex comprised by CD41 and CD61 through non-covalent association. CD41/CD61 is mainly expressed by platelets and megakaryocytes. The resting form of the CD41/CD61 complex is involved in platelet activation and aggregation by binding to immobilized fibrinogen. After activation, CD41/CD61 becomes a receptor for soluble fibrinogen and several other RGD-containing adhesive proteins such as von Willebrand Factor (vWF) and fibronectin. An absence or dysfunction of CD41/CD61 on the platelet surface results in an inherited bleeding disorder, called Glanzmann Thrombasthenia (GT). CD41/CD61 has been found on murine hematopoietic progenitor cells, indicating that this complex may play a role in regulating hematopoietic development.

Antigen 1. Matsumura-Takeda K, *et al.* 2007. *Stem Cell*. 25:862.

- References:**
2. Corbel C, *et al.* 2005. 49:279.
 3. Bennett JS, *et al.* 1983. *Proc. Natl. Acad. Sci. USA.* 80:2417.
 4. Clemetson KJ, *et al.*