

Brilliant Violet 421™ anti-mouse CD41

Catalog # / Size: 1269560 / 50 µg
1269555 / 125 µl

Clone: MWReg30

Isotype: Rat IgG1, κ

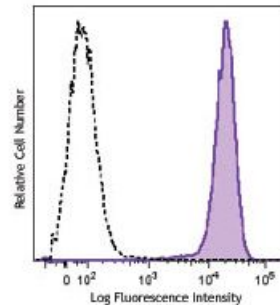
Immunogen: Mouse platelets

Reactivity: Mouse

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



C57BL/6 platelets were stained with CD41 (clone MWReg30) Brilliant Violet 421™ (filled histogram) or rat 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.

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Application Notes: Additional reported applications (for the relevant formats) include: depletion of platelets and functional assay *in vivo*.^{4,7} The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for *in vivo* studies (Cat. No. 133910).

Application References:

1. Nieswandt B, *et al.* 1999. *Blood* 94:684.
2. Teeling JL, *et al.* 2001. *Blood* 98:1095.
3. Bertrand JY, *et al.* 2005. *P. Natl. Acad. Sci. USA* 102:134.
4. Nocito A, *et al.* 2007. *Hepatology* 45:369. (Deplete)
5. Sullivan BP, *et al.* 2010. *Toxicol. Sci.* 115:286. (Deplete) [PubMed](#)
6. van der Heyde HC, *et al.* 2005. *Blood* 105:1956. (FA)
7. Marjon KD, *et al.* 2009. *J. Immunol.* 182:1397. (Deplete)
8. Rao TN, *et al.* 2015. *Stem Cell Res.* 14:307. [PubMed](#)
9. Marks-Bluth J, *et al.* 2015. *Mol Cell Biol.* 35:2165. [PubMed](#)

Description: CD41, also known as integrin $\alpha 2b$ and GPIIb, is a transmembrane glycoprotein that is expressed by platelets and megakaryocytes. It was reported that CD41 is also expressed on hematopoietic progenitors. CD41 associates with CD61 (integrin $\beta 3$) to form complexes that interact with fibrinogen, fibronectin, von Willebrand factor, and thrombin. CD41 is required for platelet adhesion and aggregation. Defect of CD41 leads to disorders of coagulation.

Antigen 1. Bakewell SJ, *et al.* 2003. *P. Natl. Acad. Sci. USA* 100:14205.
References: 2. Phillips DR, *et al.* 1991. *Cell.* 65:359.