

# CD41a Monoclonal Antibody (eBioMWRReg30 (MWRReg30)), APC-eFluor 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), APC-eFluor 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioMWRReg30 (MWRReg30)
Conjugate	APC-eFluor® 780
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573958

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	28 Publications

## Product Specific Information

**Description:** The eBioMWRReg30 monoclonal antibody reacts with mouse CD41 (fibrinogen receptor, gpIIb, integrin alpha IIb). While initially thought to be expressed exclusively on the surface of platelets and megakaryocytes, it has been demonstrated that CD41 is also expressed on hematopoietic progenitors in the embryo, fetus and adult. CD41 associates with CD61 (gpIIIa, integrin beta III) to form a receptor which plays a major role in platelet function, including binding of several adhesion molecules such as fibrinogen, fibronectin and vitronectin.

Recently, the SLAM-family markers, CD48 and CD150 have been used to reliably identify hematopoietic stem cells (HSC). Specifically, it was found that CD150+CD48- bone marrow cells were highly efficient in their ability to confer long-term multi-lineage reconstitution in irradiated mice. Furthermore, the efficiency of reconstitution was enhanced when HSCs were further enriched through the exclusion of CD41+ cells. Thus, the use of CD150+CD48-CD41- as an expression profile efficiently identifies hematopoietic stem cells.

**Applications Reported:** This eBioMWRReg30 (MWRReg30) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This eBioMWRReg30 (MWRReg30) antibody has been tested by flow cytometric analysis of mouse platelets. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is

recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

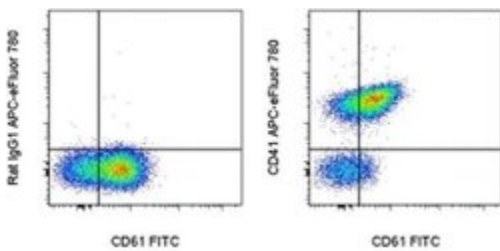
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ L IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2  $\mu$ m post-manufacturing filtered.

## Product Images For CD41a Monoclonal Antibody (eBioMWReg30 (MWReg30)), APC-eFluor 780, eBioscience™



### CD41a Antibody (47-0411-82) in Flow

Staining of mouse platelets with Anti-Mouse/Rat CD61 (Integrin beta 3) FITC (Product # 11-0611-82) and 0.125  $\mu$ g of Rat IgG1 K Isotype Control APC-eFluor® 780 (Product # 47-4301-80) (left) or 0.125  $\mu$ g of Anti-Mouse CD41 APC-eFluor® 780 (right). Total events were used for analysis.

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## Flow Cytometry (28)

The Journal of biological chemistry

### SNAP23 is essential for platelet and mast cell development and required in connective tissue mast cells for anaphylaxis.

"Published figure using CD41a monoclonal antibody (Product # 47-0411-82) in Flow Cytometry"

Authors: Cardenas RA, Gonzalez R, Sanchez E, Ramos MA, Cardenas EI, Rodarte AI, Alcazar-Felix RJ, Isaza A, Burns AR, Heidelberger R, Adachi R

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

Scientific reports

### Iron deficiency disrupts embryonic haematopoiesis but not the endothelial to haematopoietic transition.

"Published figure using CD41a monoclonal antibody (Product # 47-0411-82) in Flow Cytometry"

Authors: Shvartsman M, Bilican S, Lancrin C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

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