# CD41a Monoclonal Antibody (eBioMWReg30 (MWReg30)), APC, 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, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | eBioMWReg30 (MWReg30) |
| Conjugate | APC |
| Form | Liquid |
| Concentration | 0.2 mg/mL |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.1% gelatin |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_1603237 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Flow Cytometry (Flow) | 0.25 µg/test | 44 Publications |

### Product Specific Information

Description: The eBioMWReg30 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 eBioMWReg30 (MWReg30) antibody has been reported for use in flow cytometric analysis.

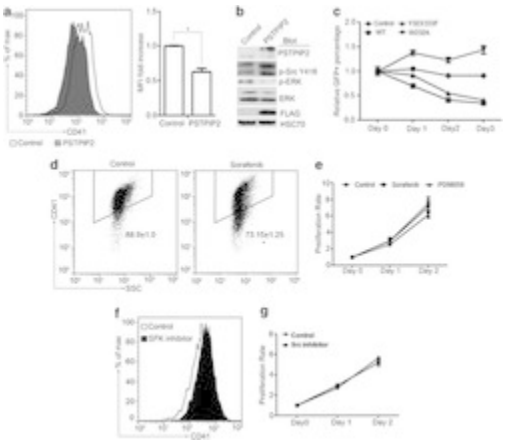
Applications Tested: This eBioMWReg30 (MWReg30) antibody has been tested by flow cytometric analysis of mouse platelets. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is

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

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

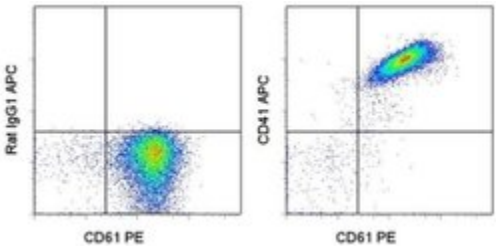
Filtration: 0.2 µm post-manufacturing filtered.

## Advanced Verification Data



**CD41a Antibody (17-0411-82)**
Figure 4 PSTPIP2 represses CD41 expression and proliferation in G1ME cells. ( a ) Control or PSTPIP2-expressing vectors were introduced into G1ME cells through retroviral infection. The infected cells were selected with puromycin for 2 days and used for detecting CD41 expression by staining cells with anti-CD41-APC antibody and analyzed by flow cytometry. Histogram is representative results of two experiments with similar results. The bar graph is the statistics of the left panel. ( b ) The infected cells were also harvested to make protein lysates for western blot to detect activation of Src (p-Src Y416) and ERK (p-ERK). The expression of PSTPIP2 (FLAG-tagged) and ERK was also measured. ( c ) G1ME cells were infected with control vector or vectors expressing WT, Y323/333F, W232A forms of PSTPIP2 and further cultured for 4 consecutive days. All vectors expressed a GFP bicistronically and the percentage GFP+ cells on each day were monitored by flow cytometry. The percentage of GFP+ cells on each day was normalized to Day 0 (24 h after the last infection) and presented as relative GFP+ percentage. Data were statistics of two experiments with similar results. ( d ) The G1ME cells were cultured with or without Sorafenib (5 mu M) overnight and the expression of CD41 were detected by staining cells with anti-CD41-APC antibody and analyzed by flow cytometry. Numbers (mean+-S.D.) indicate percentage of the gated cells. ( e ) G1ME cells were treated with or without Sorafenib and PD980 Cell treatment validation info.

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




**CD41a Antibody (17-0411-82) in Flow**
Staining of mouse platelets with Anti-Mouse CD61 PE (Product # 12-0611-82) and 0.125 µg of Rat IgG1 K Isotype Control APC (Product # 17-4301-82) (left) or 0.125 µg of Anti-Mouse CD41 APC (right).

### View more figures on thermofisher.com

## 44 References

### Flow Cytometry (44)

**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 # 17-0411-82) 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

**Arteriosclerosis, thrombosis, and vascular biology**

#### Platelet Dysfunction and Thrombosis in JAK2$^{V617F}$-Mutated Primary Myelofibrotic Mice.

"17-0411 was used in Flow cytometry/Cell sorting to examine the propensity for thrombosis, as well as platelet activation properties in a mouse model of primary myelofibrosis induced by JAK2V617F mutation."

Authors: Matsuura S,Thompson CR,Belghasem ME,Bekendam RH,Piasecki A,Leiva O,Ray A,Italiano J,Yang M,Merill-Skoloff G,Chitalia VC,Flaumenhaft R,Ravid K

**Species**
Mouse

**Dilution**
Not Cited

**Year**
2020

View more Flow references on thermofisher.com

### More applications with references on thermofisher.com