

CD41a Monoclonal Antibody (eBioMWRReg30 (MWRReg30)), FITC, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Human, Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioMWRReg30 (MWRReg30)
Conjugate	FITC
Form	Liquid
Concentration	0.5 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_763481

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	6 Publications
Flow Cytometry (Flow)	0.125 µg/test	44 Publications
Immunoprecipitation (IP)	-	1 Publication
Functional Assay (FN)	-	1 Publication
Peptide Array (Array)	-	1 Publication

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.

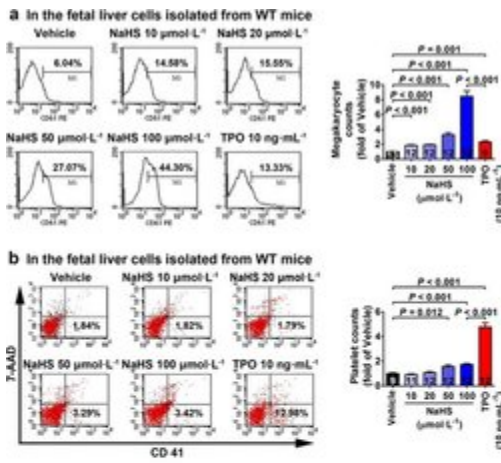
Applications Reported: This eBioMWRReg30 (MWRReg30) antibody has been reported for use in flow cytometric analysis.

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 0.125 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

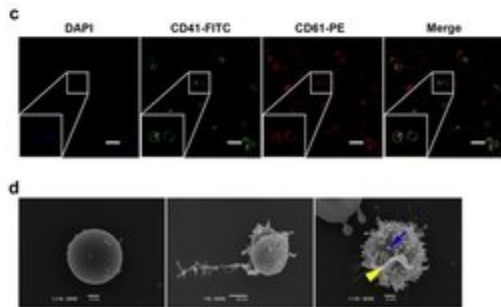
Filtration: 0.2 µm post-manufacturing filtered.

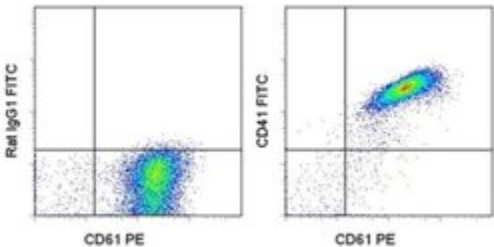
Advanced Verification Data



CD41a Antibody (11-0411-82)

Fig. 2 H 2 S treatment promotes generation of megakaryocytes/platelets in cultured fetal liver cells. a NaHS treatment caused a concentration-dependent increase in megakaryocytes which were identified as CD61-positive cells using flow cytometry in fetal liver cells isolated from WT mice. b Platelets were identified as CD41-positive and 7-AAD-negative signals using flow cytometry. Platelet counts were significantly increased with NaHS treatment at 50 and 100 µmol L⁻¹ in the culture medium of fetal liver cells. TPO treatment (10 ng mL⁻¹) also increased platelet counts. c Morphology of megakaryocytes in cultured fetal liver cells were shown with a confocal fluorescence microscopy with staining of DAPI, CD41-FITC, and CD61-PE. Scale bar = 50 µm. d Scanning electron microscopy revealed pseudopod formation (blue arrow) and membrane blebbing (yellow arrow) in the megakaryocytes identified in cultured fetal liver cells treated with NaHS (100 µmol L⁻¹). Data in the graphs are means ± SEM. P values less than 0.05 represent statistical significance Cell treatment validation info.





CD41a Antibody (11-0411-82) in Flow

Staining of C57BL/6 platelets with Anti-Mouse/Rat CD61 (Integrin beta 3) PE (Product # 12-0611-82) and 0.06 µg of Rat IgG1 K Isotype Control FITC (Product # 11-4301-82) (left) or 0.06 µg of Anti-Mouse CD41 FITC (right).

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Western Blot (1)

Nature

A directional switch of integrin signalling and a new anti-thrombotic strategy.

"Published figure using CD41a monoclonal antibody (Product # 11-0411-82) in Flow Cytometry"
 Authors: Shen B,Zhao X,O'Brien KA,Stojanovic-Terpo A,Delaney MK,Kim K,Cho J,Lam SC,Du X

Species
Hamster

Dilution
Not Cited

Year
2013

Immunohistochemistry (5)

British journal of haematology

All-trans-retinoic acid shifts Th1 towards Th2 cell differentiation by targeting NFAT1 signalling to ameliorate immune-mediated aplastic anaemia.

"Published figure using CD41a monoclonal antibody (Product # 11-0411-82) in Immunohistochemistry"
 Authors: Tang D,Liu S,Sun H,Qin X,Zhou N,Zheng W,Zhang M,Zhou H,Tuersunayi A,Duan C,Chen J

Species
Not Applicable

Dilution
Not Cited

Year
2020

Development (Cambridge, England)

Transient loss of venous integrity during developmental vascular remodeling leads to red blood cell extravasation and clearance by lymphatic vessels.

Authors: Zhang Y, Daubel N, Stritt S, Mäkinen T

Species
Mouse

Dilution
1:50

Year
2018

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Frozen) (1)

Blood

CLEC-2 is required for development and maintenance of lymph nodes.

"11-0411 was used in Immunofluorescence to investigate the role that CLEC-2 plays in the development and maintenance of lymph nodes."

Authors: Bénézec C,Nayar S,Finney BA,Withers DR,Lowe K,Desanti GE,Marriott CL,Watson SP,Caamaño JH, Buckley CD,Barone F

Species
Mouse

Dilution
Not Cited

Year
2014

More applications with references on thermofisher.com

ICC/IF (6) Flow (44) IP (1) FN (1) Array (1)

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