

CD41a Monoclonal Antibody (eBioMWRReg30 (MWRReg30)), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioMWRReg30 (MWRReg30)
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_10545856

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)	0.25 µg/test	36 Publications
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	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 and functional assays.

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

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Western Blot (1)

Nature

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

"Published figure using CD41a monoclonal antibody (Product # 16-0411-85) 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 # 16-0411-85) 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.

"Published figure using CD41a monoclonal antibody (Product # 16-0411-85) in Immunofluorescence"
 Authors: Zhang Y,Daubel N,Stritt S,Mäkinen T

Species
Not Applicable

Dilution
Not Cited

Year
2018

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

Immunohistochemistry (Frozen) (1)

Nature

Leukaemogenic effects of Ptpn11 activating mutations in the stem cell microenvironment.

"16041185 was used in immunohistochemistry - frozen section to elucidate the contribution of Ptpn11 mutations in the bone marrow microenvironment to leukaemogenesis"

Authors: Dong L,Yu WM,Zheng H,Loh ML,Bunting ST,Pauly M,Huang G,Zhou M,Broxmeyer HE,Scadden DT,Qu CK

Species
Mouse

Dilution
Not Cited

Year
2016

More applications with references on thermofisher.com

ICC/IF (6) Flow (36) ELISA (1) IP (1) FN (1) Array (1)

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