CD41a Monoclonal Antibody (eBioMWReg30 (MWReg30)), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Cat, Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioMWReg30 (MWReg30)
Conjugate	Biotin
Form	Liquid
Concentration	0.5 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_763484

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	7 Publications
Flow Cytometry (Flow)	0.125 µg/test	46 Publications
Immunoprecipitation (IP)	-	1 Publication
Functional Assay (FN)	-	1 Publication
Peptide array (Array)	-	1 Publication

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.

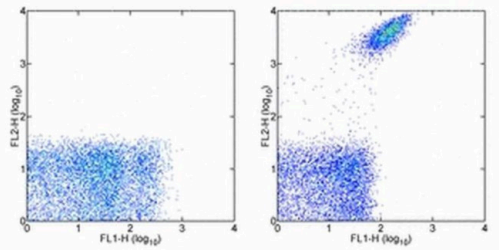
Recently, the SLAM-family markers, CD48 and CD150 have been used to reliably identify hematopoietic stem cells (HSC). Specifically, it was found that CD150+CD48- bone marrow cells were highly efficient in their ability to confer long-term multi-lineage reconstitution in irradiated mice. Furthermore, 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 0.125 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD41a Antibody (13-0411-82) in Flow
Staining of mouse platelets with Anti-Mouse/Rat CD61 (Integrin beta 3) FITC (Product # 11-0611-82) and 0.06 µg of Rat IgG1 K Isotype Control Biotin (Product # 13-4301-82) (left) or 0.06 µg of Anti-Mouse CD41 Biotin (right) followed by Streptavidin PE (Product # 12-4317-87).

View more figures on thermofisher.cn

63 References

Western Blot (1)

Nature

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

"Published figure using CD41a monoclonal antibody (Product # 13-0411-82) in Flow Cytometry"

Authors: Shen B,Zhao X,O'Brien KA,Stojanovic-Terpo A,Delaney MK,Kim K,Cho J,Lam SC,Du X

Year
2013

Species
Hamster

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 # 13-0411-82) 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

Year
2020

Nature medicine

Adrenergic nerve degeneration in bone marrow drives aging of the hematopoietic stem cell niche.

"Published figure using CD41a monoclonal antibody (Product # 13-0411-82) in Immunohistochemistry"

Authors: Maryanovich M,Zahalka AH,Pierce H,Pinho S,Nakahara F,Asada N,Wei Q,Wang X,Ciero P,Xu J,Leftin A, Frenette PS

Year
2018

View more IHC references on thermofisher.cn

Immunohistochemistry (Frozen) (1)

Nature

The haemangioblast generates haematopoietic cells through a haemogenic endothelium stage.

"13-0411 was used in Immunohistochemistry to merge the two a priori conflicting theories on the origin of haematopoietic development into a single linear developmental process."

Authors: Lancrin C,Sroczynska P,Stephenson C,Allen T,Kouskoff V,Lacaud G

Year
2009

Species
Mouse

More applications with references on thermofisher.cn

ICC/IF (7) Flow (46) IP (1) FN (1) Array (1)