

CD44 Monoclonal Antibody (IM7), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Rat, Fruit fly, Non-human primate, Bovine, Human, Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IM7
Conjugate	PE
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_465664

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	195 Publications

Product Specific Information

Description: The IM7 monoclonal antibody reacts with all isoforms of mouse CD44 (Pgp-1). CD44 is expressed by hematopoietic and non-hematopoietic cells. Bone marrow myeloid cells and memory T cells highly express this antigen and peripheral B and T cells can upregulate the expression of CD44. CD44 functions as an adhesion molecule through its binding to hyaluronate, an extracellular matrix component.

Applications Reported: The IM7 antibody has been reported for use in flow cytometric analysis.

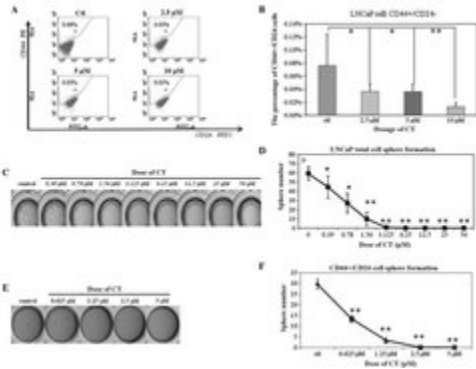
Applications Tested: The IM7 antibody has been tested by flow cytometric analysis of mouse bone marrow cells and splenocytes. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number 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: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

CD44 Antibody (12-0441-82)

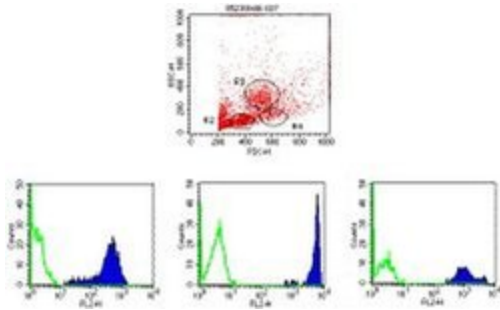
Figure 3. CT targets LNCaP TICs. (A) FACS analysis was performed to determine the percentage of CD44+CD24- cells after treatment with increasing doses of CT (2.5, 5 and 10 uM). Data from a representative experiment (from a total of three) are shown. (B) Percentage of CD44 + CD24 - LNCaP cells compared to untreated control. The percentage reduced in a dose dependent manner, however no statistically significant difference was observed between the control and CT treated groups. (C) Sphere formation assay quantification was performed using increasing doses of CT. (D) The sphere forming ability was significantly inhibited by CT while the dose up to 1.5 uM, (*P<0.05; **P<0.01). (E) Sphere formation assay of CD44 + /CD24 - cells was performed using increasing doses of CT. (F) The sphere forming ability were inhibited by CT while the dose up to 0.625 uM (**P<0.05; *P<0.01). FACS, fluorescent activated cell sorting; CT, cryptotanshinone; TICs, tumor initiating cells. Cell treatment validation info.



Product Images For CD44 Monoclonal Antibody (IM7), PE, eBioscience™

CD44 Antibody (12-0441-82) in Flow

Differential expression of Anti-Human/Mouse CD44 PE on mouse bone marrow cells. BALB/c bone marrow cells were stained with 0.06 µg of Anti-Human/Mouse CD44 PE. Total viable cells were gated further on their light scatter profile. The lymphoid lineage cells (R2) express Anti-Human/Mouse CD44 PE at an intermediate level, while the myeloid lineage cells (R3 & R4) display much higher levels of Anti-Human /Mouse CD44 PE surface expression. The overlay histogram on each panel (green) is the autofluorescence of cells.



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Immunocytochemistry (1)

Nature communications

Photothermal therapy with immune-adjuvant nanoparticles together with checkpoint blockade for effective cancer immunotherapy.

"12-0441 was used in Immunohistochemistry to investigate the use of immuneadjuvant nanoparticles for photothermal tumour ablation in mice and their potential for cancer immunotherapy."

Authors: Chen Q,Xu L,Liang C,Wang C,Peng R,Liu Z

Species
Mouse

Dilution
Not Cited

Year
2016

Flow Cytometry (195)

Stem cells international

Therapeutic Effects of Human Urine-Derived Stem Cells in a Rat Model of Cisplatin-Induced Acute Kidney Injury In Vivo and In Vitro.

"Published figure using CD44 monoclonal antibody (Product # 12-0441-82) in Flow Cytometry"

Authors: Sun B,Luo X,Yang C,Liu P,Yang Y,Dong X,Yang Z,Xu J,Zhang Y,Li L

Species
Human

Dilution
Not Cited

Year
2021

EBioMedicine

Near-infrared photoimmunotherapy targeting human-EGFR in a mouse tumor model simulating current and future clinical trials.

"Published figure using CD44 monoclonal antibody (Product # 12-0441-82) in Flow Cytometry"

Authors: Okada R,Furusawa A,Vermeer DW,Inagaki F,Wakiyama H,Kato T,Nagaya T,Choyke PL,Spanos WC,Allen CT, Kobayashi H

Species
Not Applicable

Dilution
Not Cited

Year
2021

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More applications with references on thermofisher.com

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