

CD44 Monoclonal Antibody (IM7), Super Bright 780, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Human, Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IM7
Conjugate	Super Bright 780
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2722969

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	9 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: This IM7 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This IM7 antibody has been tested by flow cytometric analysis of mouse bone marrow cells and splenocyte suspensions. This can be used at less than or equal to 0.5 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.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

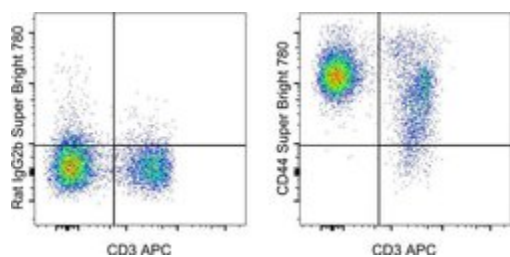
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; **Emission:** 780 nm; **Laser:** Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD44 Monoclonal Antibody (IM7), Super Bright 780, eBioscience™



CD44 Antibody (78-0441-80) in Flow

Staining of mouse splenocytes with with CD3e Monoclonal Antibody, APC (Product # 17-0031-82) and 0.25 μ g of Rat IgG2b kappa Isotype Control, Super Bright 780 (Product # 78-4031-82) (left) or 0.25 μ g of CD44 Monoclonal Antibody, Super Bright 780 (right). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

Immunohistochemistry (2)

Nature communications

The white matter is a pro-differentiative niche for glioblastoma.

"Published figure using CD44 monoclonal antibody (Product # 78-0441-80) in Immunohistochemistry"

Authors: Brooks LJ, Clements MP, Burden JJ, Kocher D, Richards L, Devesa SC, Zaka L, Woodberry M, Ellis M, Jaunmuktane Z, Brandner S, Morrison G, Pollard SM, Dirks PB, Marguerat S, Parrinello S

Species
Not Applicable

Dilution
Not Cited

Year
2021

Oncotarget

ST6GALNAC1 plays important roles in enhancing cancer stem phenotypes of colorectal cancer via the Akt pathway.

"Published figure using CD44 monoclonal antibody (Product # 78-0441-80) in Immunohistochemistry"

Authors: Ogawa T, Hirohashi Y, Murai A, Nishidate T, Okita K, Wang L, Ikehara Y, Satoyoshi T, Usui A, Kubo T, Nakastugawa M, Kanaseki T, Tsukahara T, Kutomi G, Furuhashi T, Hirata K, Sato N, Mizuguchi T, Takemasa I, Torigoe T

Species
Not Applicable

Dilution
Not Cited

Year
2017

Flow Cytometry (9)

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 # 78-0441-80) 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

International journal of molecular sciences

Therapeutic Potential of Mesenchymal Stem Cells in a Pre-Clinical Model of Diabetic Kidney Disease and Obesity.

"Published figure using CD44 monoclonal antibody (Product # 78-0441-80) in Flow Cytometry"

Authors: Sávio-Silva C, Soinski-Sousa PE, Simplicio-Filho A, Bastos RMC, Beyerstedt S, Rangel ÉB

Species
Not Applicable

Dilution
Not Cited

Year
2021

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

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.