

# CD44 Monoclonal Antibody (IM7), Super Bright 702, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IM7
Conjugate	Super Bright 702
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_2662580

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.25 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:** 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 0.25 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 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 Staining Buffer (cat. SB-4400) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer.

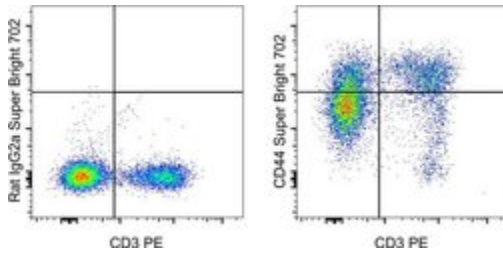
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ 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: 702 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 702, eBioscience™



### CD44 Antibody (67-0441-82) in Flow

Staining of SW splenocytes with Anti-Mouse CD3 PE (Product # 12-0032) and Rat IgG2a K Isotype Control (Product # 67-4321-82) (left) or 0.125  $\mu$ g of Anti-Mouse CD44 Super Bright 702 (right). Cells in the lymphocyte gate 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 # 67-0441-82) in Immunohistochemistry"

Authors: Brooks LJ, Clements MP, Burden JJ, Kocher D, Richards L, Devesa SC, Zarka 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 # 67-0441-82) 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 # 67-0441-82) 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

### 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 # 67-0441-82) 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](#)

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