

# 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   |
| Excitation/Emission Max     | 413/780 nm  |
| 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)   | -               | 10 Publications |
| Immunocytochemistry (ICC/IF) | -               | 9 Publications  |
| Flow Cytometry (Flow)        | 0.5 µg/test     | 78 Publications |
| Neutralization (Neu)         | -               | 1 Publication   |

## 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 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 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).

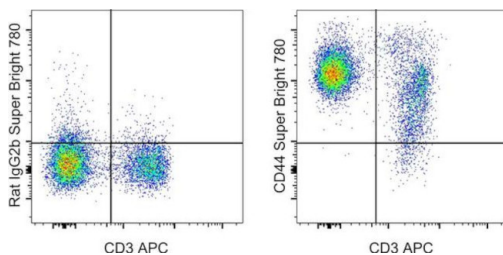
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ 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: 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 CD3e Monoclonal Antibody, APC (Product # 17-0031-82) and 0.25  $\mu$ g of Rat IgG2b kappa Isotype Control, Super Bright 780 (Product # 78-4031-82) (left) or 0.25  $\mu$ 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 (10)

International journal of molecular sciences

### CXCR4, CXCR5 and CD44 May Be Involved in Homing of Lymphoma Cells into the Eye in a Patient Derived Xenograft Homing Mouse Model for Primary Vitreoretinal Lymphoma.

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

Authors: Babst N, Isbell LK, Rommel F, Tura A, Ranjbar M, Grisanti S, Tschuch C, Schueler J, Doostkam S, Reinacher PC, Duyster J, Kakkassery V, von Bubnoff N

Year  
2022

International journal of molecular sciences

### High-Contrast Stimulation Potentiates the Neurotrophic Properties of Müller Cells and Suppresses Their Pro-Inflammatory Phenotype.

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

Authors: Zloh M, Kutilek P, Stofkova A

Year  
2022

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

## Immunocytochemistry (9)

iScience

### CD95/Fas protects triple negative breast cancer from anti-tumor activity of NK cells.

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

Authors: Qadir AS, Guégan JP, Ginestier C, Chaibi A, Bessede A, Charafe-Jauffret E, Macario M, Lavoué V, Rouge TM, Law C, Vilker J, Wang H, Stroup E, Schipma MJ, Bridgeman B, Murmann AE, Ji Z, Legembre P, Peter ME

Year  
2021

Cell reports

### c-FOS drives reversible basal to squamous cell carcinoma transition.

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

Authors: Kuonen F, Li NY, Haensel D, Patel T, Gaddam S, Yerly L, Rieger K, Aasi S, Oro AE

Year  
2021

[View more ICC/IF references on thermofisher.com](#)

## More applications with references on thermofisher.com

Flow (78)

Neu (1)

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