# CD44 Monoclonal Antibody (IM7), Super Bright 645, 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 645, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	IM7
Conjugate	Super Bright 645
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_2662590

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	1 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 splenocytes. This may be used at less than or equal to 1.0  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

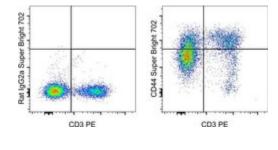
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information. Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 645 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 645, eBioscience™



#### CD44 Antibody (64-0441-82) in Flow

Staining of C57BL/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.5  $\mu$ g of Rat IgG2b kappa Isotype Control Super Bright 645 (Product # 64-4031-82) (left) or 0.5  $\mu$ g of Anti-Human/Mouse CD44 Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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### **□** 11 References

# Immunohistochemistry (2)

Nature communications	Species
The white matter is a pro-differentiative niche for glioblastoma.	Not Applicable <b>Dilution</b> Not Cited
"Published figure using CD44 monoclonal antibody (Product # 64-0441-82) in Immunohistochemistry"	
Authors: Brooks LJ,Clements MP,Burden JJ,Kocher D,Richards L,Devesa SC,Zakka L,Woodberry M,Ellis M,	
Jaunmuktane Z,Brandner S,Morrison G,Pollard SM,Dirks PB,Marguerat S,Parrinello S	Year
	2021
Oncotarget	Species
ST6GALNAC1 plays important roles in enhancing cancer stem	Not Applicable
phenotypes of colorectal cancer via the Akt pathway.	Dilution
"Published figure using CD44 monoclonal antibody (Product # 64-0441-82) in Immunohistochemistry"	Not Cited
Authors: Ogawa T,Hirohashi Y,Murai A,Nishidate T,Okita K,Wang L,Ikehara Y,Satoyoshi T,Usui A,Kubo T,	Year
Nakastugawa M,Kanaseki T,Tsukahara T,Kutomi G,Furuhata T,Hirata K,Sato N,Mizuguchi T,Takemasa I,Torigoe T	2017
Flow Cytometry (9)	
EBioMedicine	Species
EBioMedicine Near-infrared photoimmunotherapy targeting human-EGFR in a mouse	
EBioMedicine	Not Applicable
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 # 64-0441-82) in Flow Cytometry" Authors: Okada R,Furusawa A,Vermeer DW,Inagaki F,Wakiyama H,Kato T,Nagaya T,Choyke PL,Spanos WC,Allen CT,	Not Applicable Dilution
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 # 64-0441-82) in Flow Cytometry"	Not Applicable <b>Dilution</b> Not Cited
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 # 64-0441-82) 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	Not Applicable 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 # 64-0441-82) 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	Not Applicable Dilution Not Cited Year 2021 Species
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 # 64-0441-82) 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 International journal of molecular sciences Therapeutic Potential of Mesenchymal Stem Cells in a Pre-Clinical Model	Not Applicable Dilution Not Cited Year 2021 Species Not Applicable
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 # 64-0441-82) 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	Not Applicable Dilution Not Cited Year 2021 Species Not Applicable Dilution
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 # 64-0441-82) 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 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 # 64-0441-82) in Flow Cytometry"	Not Applicable Dilution Not Cited Year 2021 Species Not Applicable
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