

# CD44 Monoclonal Antibody (IM7), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Fruit fly, Non-human primate, Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IM7
Conjugate	Biotin
Form	Liquid
Concentration	0.5 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_466442

Applications	Tested Dilution	Publications
Western Blot (WB)	-	5 Publications
Immunohistochemistry (IHC)	-	9 Publications
Immunocytochemistry (ICC/IF)	-	5 Publications
Flow Cytometry (Flow)	0.125 µg/test	88 Publications
Functional Assay (FN)	-	1 Publication
Fluorescence Resonance Energy Transfer (FRET)	-	1 Publication
Miscellaneous PubMed (Misc)	-	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.

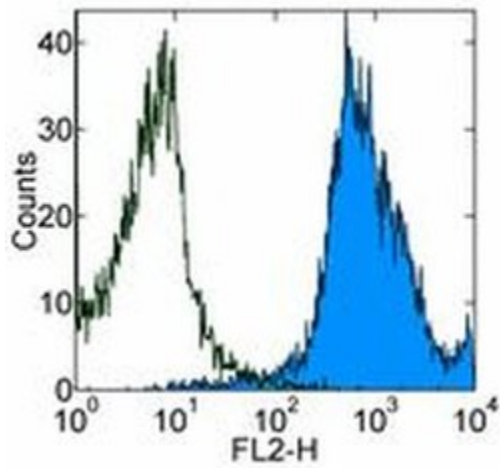
**Applications Reported:** The IM7 antibody has been reported for use in flow cytometric analysis.

**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 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.

Filtration: 0.2  $\mu\text{m}$  post-manufacturing filtered.

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



#### CD44 Antibody (13-0441-82) in Flow

Staining of C57BL/6 splenocytes with 0.06  $\mu\text{g}$  of Rat IgG2b kappa Isotype Control Biotin (Product # 13-4031-82) (open histogram) or 0.06  $\mu\text{g}$  of Anti-Human/Mouse CD44 Biotin (filled histogram) followed by Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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

## Western Blot (5)

PloS one

### Multi-lineage differentiation of human umbilical cord Wharton's Jelly Mesenchymal Stromal Cells mediates changes in the expression profile of stemness markers.

"Published figure using CD44 monoclonal antibody (Product # 13-0441-82) in Immunofluorescence"

Authors: Ali H,Al-Yatama MK,Abu-Farha M,Behbehani K,Al Madhoun A

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

Nature

### Oncogene ablation-resistant pancreatic cancer cells depend on mitochondrial function.

"13-0441 was used in Western Blotting to present a therapeutic strategy for managing pancreatic cancer by targeting the KRAS pathway and mitochondrial respiration."

Authors: Viale A,Pettazoni P,Lyssiotis CA,Ying H,Sánchez N,Marchesini M,Carugo A,Green T,Seth S,Giuliani V,Kost-Alimova M,Muller F,Colla S,Nezi L,Genovese G,Deem AK,Kapoor A,Yao W,Brunetto E,Kang Y,Yuan M,Asara JM,Wang YA,Heffernan TP,Kimmelman AC,Wang H,Fleming JB,Cantley LC,DePinho RA,Draetta GF

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2014

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

## Immunohistochemistry (9)

Nature communications

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

"Published figure using CD44 monoclonal antibody (Product # 13-0441-82) 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

**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 # 13-0441-82) 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,Furuhata T,Hirata K,Sato N,Mizuguchi T,Takemasa I,Torigoe T

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

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

## More applications with references on thermofisher.com

ICC/IF (5)   Flow (88)   FN (1)   FRET (1)   Misc (1)

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