

CD44 Monoclonal Antibody (IM7), Functional Grade, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Fruit fly, Non-human primate, Human, Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IM7
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_468955

Applications	Tested Dilution	Publications
Western Blot (WB)	-	6 Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunocytochemistry (ICC/IF)	-	6 Publications
Flow Cytometry (Flow)	0.125 µg/test	98 Publications
Functional Assay (FN)	Assay-Dependent	-
Fluorescence Resonance Energy Transfer (FRET)	-	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. IM7 has also been reported in complement-dependent cytotoxicity.

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 10⁵ to 10⁸ cells/test. It is

recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

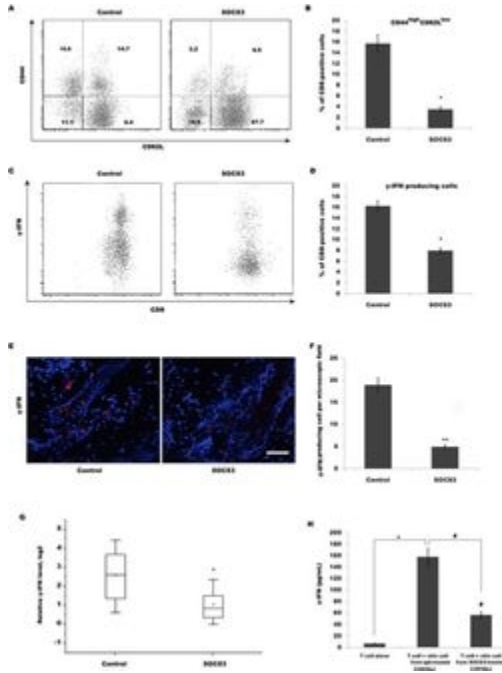
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

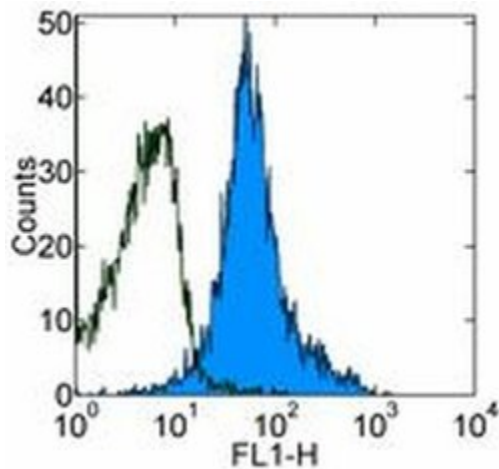
Advanced Verification Data



CD44 Antibody (16-0441-82)

Figure 3 SOCS3 treatment decreases CD44 high CD62L low effector memory CD8+ T cells, resulting in the reduction of IFN-gamma production (A) CD8+ T cells were isolated from SDLNs of SOCS3-treated C3H/HeJ AA mice and were used to assay the level of CD44 and CD62L. Flow cytometry data showed that 15.8% of CD8+ T cells from SDLNs were CD44 high CD62L low in C3H/HeJ AA mice, whereas SOCS3 treatment markedly decreases CD44 high CD62L low effector memory CD8+ T cells. Data are representative of three independent experiments. Isotype-matched, directly conjugated primary Abs were additionally used to confirm Ab specificity for all markers (data not shown). (B) Percentage of CD44 high CD62L low effector memory CD8+ T cells was quantitated by flow cytometric analysis. Data are mean \pm SD of three independent experiments. (C) CD8+ T cells were isolated from skins of SOCS3-treated C3H/HeJ AA mice and were used to assay the percentage of IFN-gamma-producing CD8+ T cells. (D) Percentage of IFN-gamma-producing CD8+ T cells was quantitated by flow cytometric analysis. Data are mean \pm SD of three independent experiments. (E and F) IFN-gamma level in SOCS3-treated AA skin was evaluated by immunofluorescent microscopy. Data are mean \pm SD of three independent experiments. (G) IFN-gamma mRNA level in the skin of grafted recipients was assayed after treatment with SOCS3 or IgG control (n = 6 mice/group). SOCS3-treated group possessed a lower ability to produce IFN-gamma compared with control. (H) Cell treatment validation info.

Product Images For CD44 Monoclonal Antibody (IM7), Functional Grade, eBioscience™



CD44 Antibody (16-0441-82) in Flow

Staining of BALB/c splenocytes with 0.06 µg of Rat IgG2b kappa Isotype Control Functional Grade Purified (Product # 16-4031-81) (open histogram) or 0.06 µg of Anti-Human/Mouse CD44 Functional Grade Purified (filled histogram) followed by Anti-Rat IgG FITC (Product # 11-4811-85). Total viable cells were used for analysis.

📄 121 References

Western Blot (6)

Oncology letters

Comparable roles of CD44v8-10 and CD44s in the development of bone metastases in a mouse model.

"Published figure using CD44 monoclonal antibody (Product # 16-0441-82) in Immunohistochemistry"

Authors: Hiraga T, Nakamura H

Species

Human
Not Applicable

Dilution

Not Cited
Not Cited

Year

2016

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 # 16-0441-82) in Immunofluorescence"

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

Species

Not Applicable

Dilution

Not Cited

Year

2016

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

Immunohistochemistry (10)

Nature communications

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

"Published figure using CD44 monoclonal antibody (Product # 16-0441-82) 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

OncoTargets and therapy

Effect of CD44st and HER2 expression on the postoperative prognosis of breast cancer patients.

"Published figure using CD44 monoclonal antibody (Product # 16-0441-82) in Immunohistochemistry"

Authors: Chen DD, Ji JA, Yan HC, Huang GH, Fang XJ

Species

Not Applicable

Dilution

Not Cited

Year

2020

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

More applications with references on thermofisher.com

ICC/IF (6)

Flow (98)

FRET (1)

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