## Purified anti-mouse/human CD44

**Catalog # / Size:** 1115005 / 50 μg

1115010 / 500 µg

Clone: IM7

**Isotype:** Rat IgG2b, κ

Immunogen: Dexamethasone-induced myeloid

leukemia M1 cells

Reactivity: Human

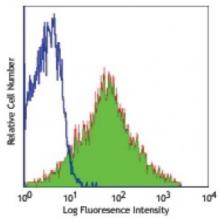
**Preparation:** The antibody was purified by affinity

chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse splenocytes stained with purified IM7, followed by antirat IgG FITC

## **Applications:**

**Applications:** Other

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each

application.

Application Notes:

Clone IM7 has been reported to recognize an epitope common to alloantigens and all isoforms of CD44<sup>17,18</sup> that is located between amino acids 145 and 186<sup>20</sup>.

Additional reported applications (for the relevant formats) include:

immunohistochemistry of acetone-fixed frozen sections and formalin-fixed

paraffin-embedded sections<sup>6,7</sup>, complement-mediated cytotoxicity1,

immunoprecipitation  $^{1,3}$ , and *in vivo* inhibition of DTH $^{4,5}$ . The LEAF<sup>™</sup> purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 103014). For highly sensitive assays, we recommend Ultra-LEAF<sup>™</sup> purified antibody (Cat. No. 103046) with a lower endotoxin limit than

standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References:

1. Trowbridge IS, et al. 1982. Immunogenetics 15:299. (ICFC, IP, CMCD)

2. Katoh S, et al. 1994. J. Immunol. 153:3440. (ELISA)

3. Budd RC, et al. 1987. J. Immunol. 138:3120. (IP)

4. Camp RL, et al. 1993. J. Exp. Med. 178:497. (Block)

5. Weiss JM, et al. 1997. J. Cell Biol. 137:1137. (Block)

6. Frank NY, et al. 2005. Cancer Res. 65:4320. (IHC) PubMed

7. Cuff CA . at al 2001. I Clim transit 100 1021. (IIIC)

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8. Lee JW, et al. 2006. Nature Immunol. 8:181.

9. Zhang N, et al. 2005. J. Immunol. 174:6967. PubMed

10. Huabiao C, et al. 2005. J. Immunol. 175:591. PubMed

11. Gui J, et al. 2007. Int. Immunol. 19:1201. PubMed

12. Wang XY, et al. 2008. Blood 111:2436. PubMed

13. Kenna TJ, et al. 2008. Blood 111:2091. PubMed

14. Yamazaki J, et al. 2009. Blood PubMed

15. Kmieciak M, et al. 2009. J. Transl. Med. 7:89. (FC) PubMed

16. Chen YW, et al. 2010. Mol. Cancer Ther. 9:2879. PubMed

17. Zheng Z, et al. 1995. J. Cell. Biol. 130:485.

- 18. Wiranowska M, et al. 2010. Int. J. Cancer 127:532.
- 19. Hirokawa Y, et al. 2014. Am J Physiol Gastrointerest Liver Physiol. 306:547. PubMed
- 20. Sandmaier BM, et al. 1998. Blood 91:3494.
- 21. Yang Y, et al. 2015. Hypertension. 65:1047. PubMed

## **Description:**

CD44 is a 80-95 kD glycoprotein also known as Hermes, Pgp1, H-CAM, or HUTCH. It is expressed on all leukocytes, endothelial cells, hepatocytes, and mesenchymal cells. As B and T cells become activated or progress to the memory stage, CD44 expression increases from low or mid levels to high levels. Thus, CD44 has been reported to be a valuable marker for memory cell subsets. High CD44 expression on Treg cells has been associated with potent suppressive function via high production of IL-10. CD44 is an adhesion molecule involved in leukocyte attachment to and rolling on endothelial cells, homing to peripheral lymphoid organs and to the sites of inflammation, and leukocyte aggregation.

## Antigen References:

- 1. Barclay AN, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.
- 2. Haynes BF, et al. 1991. Cancer Cells 3:347.
- 3. Goldstein LA, et al. 1989. Cell 56:1063.
- 4. Mikecz K, et al