

**APC/Cy7 anti-mouse/human CD44**

**Catalog # /** 1115135 / 25 µg  
**Size:** 1115140 / 100 µg

**Clone:** IM7

**Isotype:** Rat IgG2b, κ

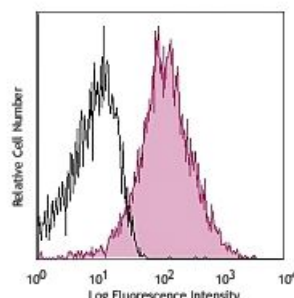
**Immunogen:** Dexamethasone-induced myeloid leukemia M1 cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2



C57BL/6 splenocytes stained with IM7 APC/Cy7

**Applications:**

**Applications:** Flow Cytometry

**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 ≤1.0 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>. This clone has been verified for immunocytochemistry (ICC) and frozen immunohistochemistry (IHC-F). 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 cytotoxicity<sup>1</sup>, immunoprecipitation<sup>1,3</sup>, and *in vivo* inhibition of DTH<sup>4,5</sup>. The LEAF™ 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™ purified antibody (Cat. No. 103046) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

**Application  
References:**

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2. Katoh S, *et al.* 1994. *J. Immunol.* 153:3440. (ELISA)
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15. Kmiecik M, *et al.* 2009. *J. Transl. Med.* 7:89. (FC) [PubMed](#)
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18. Wiranowska M, *et al.* 2010. *Int. J. Cancer* 127:532.
19. Hirokawa Y, *et al.* 2014. *Am J Physiol Gastrointest Liver Physiol.* 306:547. [PubMed](#)
20. Sandmaier BM, *et al.* 1998. *Blood* 91:3494.
21. Nagaoka M, *et al.* 2014. *J Immunol.* 193:2812. [PubMed](#)
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**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.*