

## FITC anti-mouse/human CD44

**Catalog # / Size:** 103005 / 50 µg  
103021 / 25 tests  
103022 / 100 tests  
103006 / 500 µg

**Clone:** IM7

**Isotype:** Rat IgG2b, κ

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

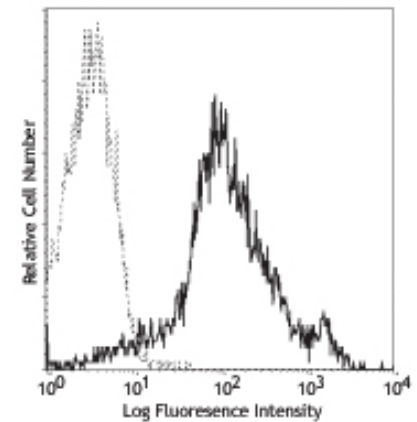
**Reactivity:** Mouse, Human, **Cross-Reactivity:** Baboon, Chimpanzee, Cynomolgus, Rhesus, Squirrel Monkey, Horse (Equine), Cattle (Bovine, Cow), Swine (Pig, Porcine), Dog (Canine), Cat (Feline)

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

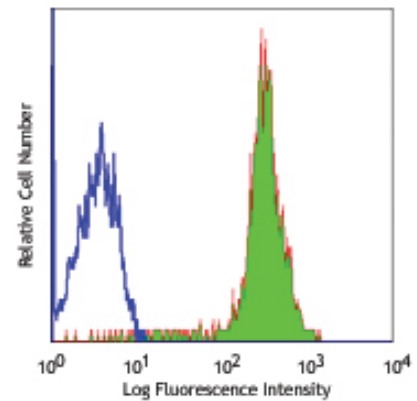
**Formulation:** test sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).  
µg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** test size: lot-specific; µg size: 0.5 mg/ml

**Storage:** The CD44 antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.**



C57BL/6 splenocytes stained with IM7 FITC



Human peripheral blood lymphocytes stained with IM7 FITC

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**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 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:**
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, *et al.* 2001. *J. Clin. Invest.* 108:1031. (IHC)
  8. Lee JW, *et al.* 2006. *Nature Immunol.* 8:181.
  9. Zhang N, *et al.* 2005. *J. Immunol.* 174:6967. PubMed
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  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. Kmiecik 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.



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19. Hirokawa Y, *et al.* 2014. *Am J Physiol Gastrointest Liver Physiol.* 306:547. PubMed  
20. Sandmaier BM, *et al.* 1998. *Blood* 91:3494.

**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.* 1995. *Nat. Med.* 1:558.
  5. Hegde V, *et al.* 2008. *J. Leukocyte Biol.* 84:134.
  6. Liu T, *et al.* 2009. *Biol. Direct* 4:40.

<b>Related Products:</b>	<b>Product</b>	<b>Clone</b>	<b>Application</b>
	FITC anti-mouse CD62L	MEL-14	FC
	Cell Staining Buffer		FC, ICC, ICFC
	FITC Rat IgG2b, $\kappa$ Isotype Ctrl	RTK4530	FC, ICFC
	TruStain fcX™ (anti-mouse CD16/32)	93	FC



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