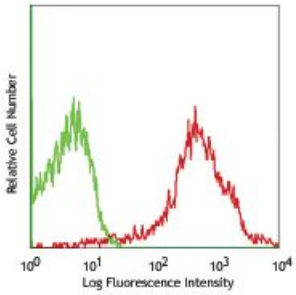
SONY

Product Data Sheet

PerCP/Cy5.5 anti-mouse/human CD44

Catalog # / Size:	1115160 / 100 µg 1115155 / 25 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 PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.2



C57BL/6 mouse splenocytes stained with IM7 PerCP/Cy5.5

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 ≤ 0.25 microg per 10^6 cells in 100 microL. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes:	Clone IM7 has been reported to recognize an epitope common to alloantigens and all isoforms of CD44[17,18] that is located between amino acids 145 and 186[20]. 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[6,7], complement-mediated cytotoxicity[1], immunoprecipitation[1,3], and *in vivo* inhibition of DTH[4,5]. 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)
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4. Camp RL, *et al.* 1993. *J. Exp. Med.* 178:497. (Block)
5. Weiss JM, *et al.* 1997. *J. Cell Biol.* 137:1137. (Block)
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11. Gui J, *et al.* 2007. *Int. Immunol.* 19:1201. 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 Gastrointerest Liver Physiol.* 306:547. PubMed
20. Sandmaier BM, *et al.* 1998. *Blood* 91:3494.
21. Charlton JJ, *et al.* 2015. *PLoS One.* 10:119200. 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*