

Purified anti-mouse CD44 Antibody

Catalog# / Size	949601 / 25 µg 949602 / 100 µg
Clone	W19210B
Regulatory Status	RUO
Other Names	Hermes, Pgp-1, H-CAM, HUTCH-1, ECMR III, gp85, Ly-24
Isotype	Rat IgG2a, κ
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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Partial recombinant mouse CD44 protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested ICC, IHC-F - Verified
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 µg per million cells in 100 µL volume. For immunocytochemistry, a concentration range of 2.5 - 5.0 µg/mL is recommended. For immunohistochemical staining on frozen tissue sections, a concentration range of 1.125 - 5.0 µg/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Not recommended for western blotting. Not reactive for human CD44 (tested in WB and IHC-P).
RRID	AB_2922650 (BioLegend Cat. No. 949601) AB_2922650 (BioLegend Cat. No. 949602)

Antigen Details

Structure	Variable splicing of CD44 gene generates many CD44 isoforms, 80-95 kD
Distribution	All leukocytes, epithelial cells, endothelial cells, hepatocytes, mesenchymal cells
Function	Leukocyte attachment and rolling on endothelial cells, stromal cells and ECM
Ligand/Receptor	Hyaluronan, MIP-1β, fibronectin, collagen

Cell Type	B cells, Endothelial cells, Epithelial cells, Leukocytes, Mesenchymal cells
Biology Area	Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Barclay AN, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Haynes BF, <i>et al.</i> 1991. <i>Cancer Cells</i>. 3:347-50. 3. Goldstein LA, <i>et al.</i> 1989. <i>Cell</i>. 56:1063-72. 4. Mikecz K, <i>et al.</i> 1995. <i>Nat Med</i>. 1:558-63. 5. Hegde V, <i>et al.</i> 2008. <i>J Leukoc Biol</i>. 84:134-42. 6. Liu T, <i>et al.</i> 2009. <i>Biol Direct</i>. 4:40.

Gene ID [960](#)

Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

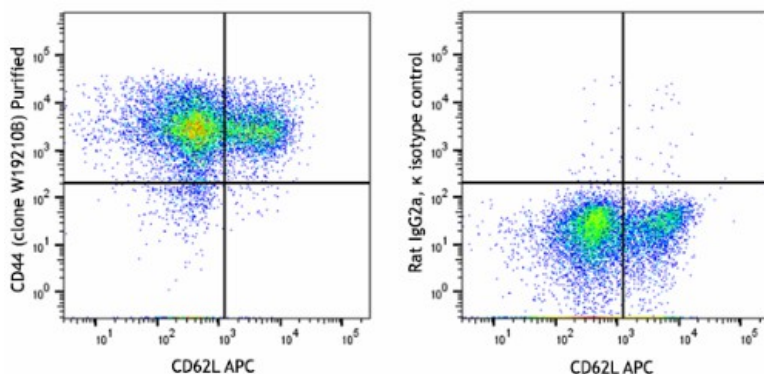
[Immunocytochemistry Staining Protocol](#)

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

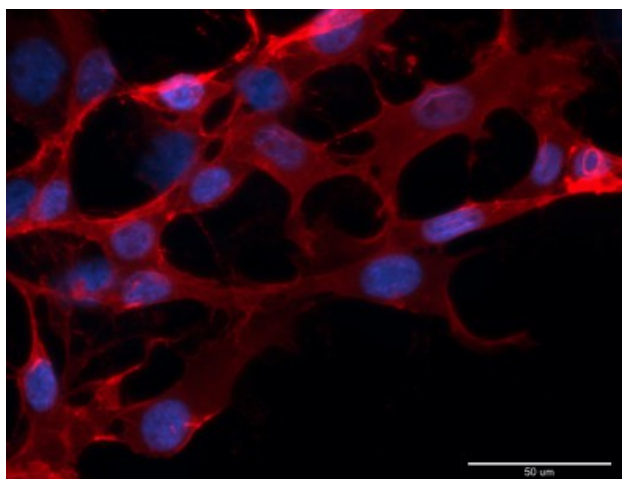
Other Formats

Purified anti-mouse CD44

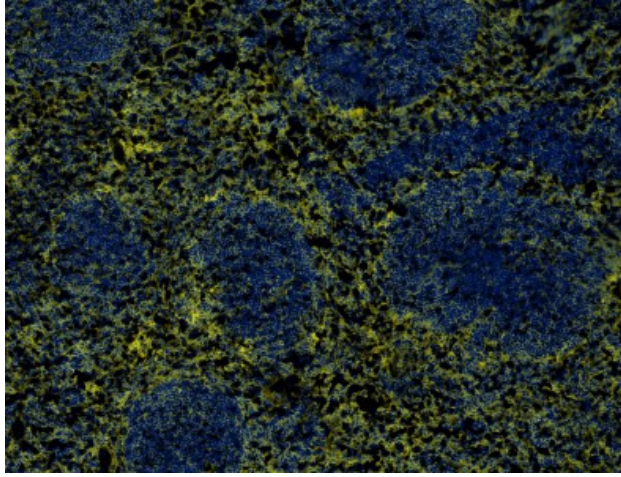
Product Data



Mouse splenocytes were stained with anti-mouse CD62L APC and purified anti-mouse CD44 (clone W19210B) (left) or rat IgG2a, κ isotype control (right) followed by PE anti-rat IgG.



ICC staining of purified anti-mouse CD44 (clone W19210B) on NIH-3T3 cells. The cells were fixed with 4% PFA, and permeabilized with 100% ice-cold methanol. Cells were then blocked with 5% fetal bovine serum in PBS for 30 minutes, and then incubated with 5 $\mu\text{g}/\text{mL}$ of the primary antibody overnight at 4°C, followed by incubation with 2.5 $\mu\text{g}/\text{mL}$ of Alexa Fluor® 594 goat anti-rat IgG (red) (Cat. No. 405422) for one hour at room temperature. Nuclei were counterstained with DAPI (blue), and the slides were mounted with ProLong™ Gold Antifade Mountant. The image was captured with a 40X objective. Scale bar: 50 μm



IHC staining using purified anti-mouse CD44 (clone W19210B) on formalin-fixed frozen mouse spleen tissue. The tissue was incubated with 5 $\mu\text{g}/\text{mL}$ of the primary antibody overnight at 4°C, followed by incubation with 2.5 $\mu\text{g}/\text{mL}$ of Alexa Fluor® 647 goat anti-rat IgG (yellow) (Cat. No. 405416) for one hour at room temperature. Nuclei were counterstained with DAPI (blue), and the slide was mounted with ProLong™ Gold Antifade Mountant. The image was captured with a 10x objective.

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