Product Description

The IM7 antibody reacts with CD44 (Ly-24), an ~80 - 95 kDa type 1 transmembrane glycoprotein involved in cell-cell and cell-matrix interactions. CD44 is expressed on the surface of many cells, including leukocytes, hepatocytes, endothelial, epithelial, and mesenchymal cells. Expression levels increase upon activation of T and B cells, and memory cells exhibit a CD44[High] phenotype. CD44 binds many ligands, including hyaluronic acid, collagen, fibronectin, growth factors and metalloproteinases, thus modulating processes such as lymphocyte activation, recirculation and homing, leukocyte rolling and aggregation, hematopoiesis, and tumor metastasis. Numerous disorders are associated with altered expression or dysfunction of CD44. Many CD44 isoforms have been identified, with alternative splicing, differential N- and O- glycosylation, and sulfation mediating the functional role(s) played by the protein in a specific cell. The IM7 monoclonal antibody reacts with an extracellular epitope found on all isoforms of CD44 and both murine allotypes.

Applications

Verified: CellSep, FC
Reported: FC
Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Naïve CD4+ T Cell Isolation Kit (Catalog #19765).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

Properties

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com.
Directions for Use: For flow cytometry the suggested use of this antibody is 5 μL per 1 x 10e6 cells in 100 μL volume or per 100 μL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.
**Data**

(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD44 Antibody, Clone IM7, PE (filled histogram) or a rat IgG2b, kappa PE isotype control antibody (open histogram).

(B) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Mouse CD44 Antibody, Clone IM7, PE (filled histogram) or a rat IgG2b, kappa PE isotype control antibody (open histogram).

**Related Products**

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**References**