Anti-Mouse F4/80 Antibody, Clone BM8, Biotin

Antibodies

Rat monoclonal IgG2a antibody against mouse F4/80, biotin-conjugated

Catalog #60027BT	500 µg	0.5 mg/mL
#60027BT.1	50 µg	0.5 mg/mL

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Product Description

The BM8 antibody reacts with the F4/80 antigen, also termed Ly-71 in mouse, an ~160 kDa transmembrane glycoprotein belonging to the EGF-TM7 family of G-protein-coupled receptors. F4/80 is considered a marker of choice for the identification of mature tissue macrophages, being broadly but variably expressed by this cell type in the liver (Kupffer cells), skin (Langerhans cells), bone marrow stroma, pancreas, thymus, spleen (red pulp), lung, and other tissues. It is also expressed by circulating monocytes, eosinophils and a subset of dendritic cells. F4/80 expression levels increase following activation of macrophages. F4/80 is reportedly the only macrophage marker suitable for distinguishing destructive from non-destructive inflammatory processes in the pancreas. The protein is thought to play a role in the generation of CD8+ regulatory T cells involved in immune tolerance.

Target Antigen Name:	F4/80
Alternative Names:	Ly71
Gene ID:	13733
Species Reactivity:	Mouse
Host Species:	Rat
Clonality:	Monoclonal
Clone:	BM8
Isotype:	IgG2a, kappa
Immunogen:	Murine (BALB/c) macrophages obtained from 14-day-old bone marrow cell cultures
Conjugate:	Biotin

Applications

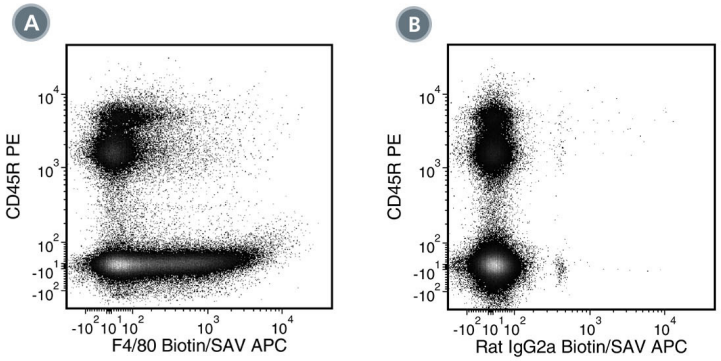
Verified:	CellSep, FC, ICC, IHC, WB
Reported:	FC, ICC, IHC, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse Monocyte Isolation Kit (Catalog #19861) and EasySep™ Mouse CD11b Positive Selection Kit (Catalog #18770).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 0.25 µg per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of C57BL/6 mouse bone marrow cells labeled with Anti-Mouse F4/80 Antibody, Clone BM8, Biotin, followed by streptavidin (SAV) APC and Anti-Mouse CD45R (B220) Antibody, Clone RA3-6B2, PE (Catalog #100-0420).
(B) Flow cytometry analysis of C57BL/6 mouse bone marrow cells labeled with Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, Biotin (Catalog #60076BT), followed by SAV APC and Anti-Mouse CD45R Antibody, Clone RA3-6B2, PE.

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

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