Antibodies

Anti-Mouse NK1.1 (CD161), Clone PK136, Biotin

Mouse monoclonal IgG2a antibody against mouse NK1.1 (CD161), biotin-conjugated

Catalog #60103BT	500 µg	0.5 mg/mL
#60103BT.1	50 µg	0.5 mg/mL

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Product Description

The PK136 antibody reacts with murine NK1.1 (CD161), an ~80 kDa homodimeric type 2 transmembrane glycoprotein and C-type lectin receptor expressed on NK cells, NK-T cells, and rare subsets of T cells and monocytes in select strains of mice. NK1.1 is encoded by the Klrb1b and Klrb1c genes, which specify CD161b and CD161c polypeptides, respectively. CD161b is expressed only by Swiss NIH and SJL mice, and CD161c by certain strains such as C57BL, FVB/N, and NZB (but not A, AKR, BALB/c, CBA/J, C3H, C57BR, C58, DBA/1, DBA/2, NOD, SJL, or 129). NK1.1 has functional roles in modulating several processes, including the activation and proliferation of NK cells, induction of interferon-γ production, and release of cytotoxic granules. Its expression on the cell surface is specifically upregulated by IL-12. For detection of NK cells in NK1.1- strains, Anti-Mouse CD49b Antibody, Clone DX5 (Catalog #60020) is recommended. DX5 recognizes CD49b (integrin α2), another commonly used NK cell marker.

Target Antigen Name:	NK1.1 (CD161)
Alternative Names:	CD161b, CD161c, Klrb1b, Klrb1c, Ly-55, Ly-59, NK-1.1, NKRP1, NKRP1a, NKRP1b
Gene ID:	17059
Species Reactivity:	Mouse (strain-specific)
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	PK136
Isotype:	IgG2a, kappa
Immunogen:	NK-1+ cells from mouse spleen and bone marrow
Conjugate:	Biotin

Applications

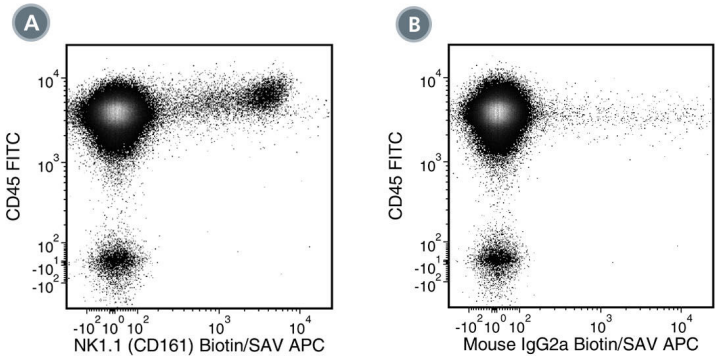
Verified:	CellSep, FC
Reported:	CellSep, FC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated from NK1.1+ mouse strains such as C57BL/6, FVB/N, NZB, Swiss NIH, and SJL with EasySep™ kits, including EasySep™ Mouse NK Cell Enrichment Kit (Catalog #19755) and EasySep™ Mouse NK Cell Isolation Kit (Catalog #19855).

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, please 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. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Anti-Mouse NK1.1 (CD161) Antibody, Clone PK136, Biotin, followed by streptavidin (SAV) APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC (Catalog #60030FI).
(B) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Mouse IgG2a, kappa Isotype Control Antibody, Clone MOPC-173, Biotin (Catalog #60071BT), followed by SAV APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC.

Related Products

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

References

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