

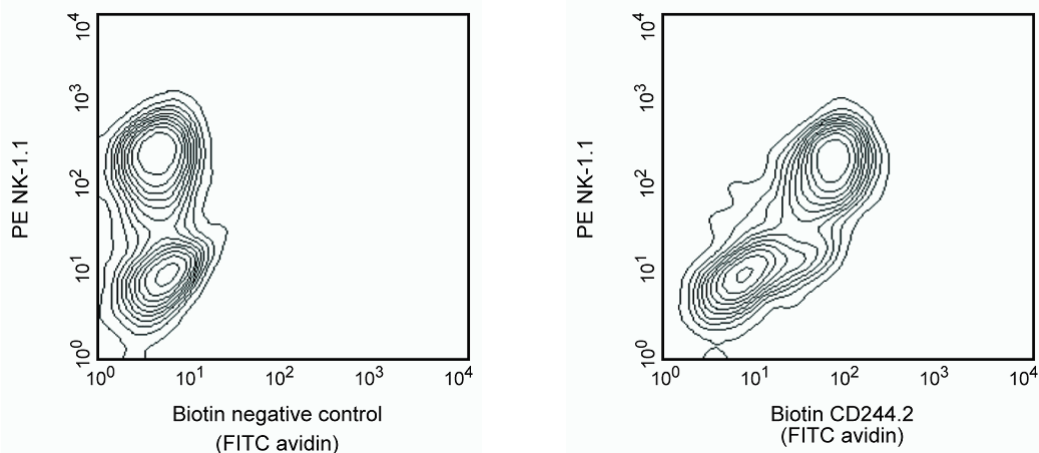
Technical Data Sheet

Biotin Mouse Anti-Mouse CD244.2**Product Information**

Material Number:	557452
Alternate Name:	2B4 B6 Alloantigen
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	2B4
Immunogen:	rIL-2-propagated NK1.1+ cells from C57BL/6 mice
Isotype:	Mouse (129) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

CD244 is a member of the CD2 subset of the immunoglobulin superfamily (CD2 IgSF). It is expressed on all natural killer (NK) cells, IL-2-activated NK (LAK) cells, committed progenitors of NK cells, and a subset of T lymphocytes which mediate non-MHC-restricted cytotoxicity, including dendritic epidermal T cells. The 2B4 antibody reacts with CD244.2, the 2B4 alloantigen which is expressed on C57BL/6 and C58/J mice, but not in most strains tested (A/J, AKR, BALB/c, CBA/J, CBA/N, C3H/He, C57BR, DBA/1, DBA/2, NZB, SJL/J, 129). At least two isoforms of CD244.2 protein, products of alternative splicing of hnRNA, are expressed on IL-2-activated C57BL/6 NK cells. They differ only in their cytoplasmic domains; with 2B4L (150-aa cytoplasmic tail) having inhibitory activity and 2B4S (93-aa tail) being stimulatory. The extracellular domain of CD244 is a ligand for another CD2 IgSF member, CD48. 2B4 antibody activates lytic and secretory functions of IL-2-cultured NK cells and CD244.2+ T cells.



Two-color analysis of CD244.2 expression on LAK cells. C57BL/6 LAK cells were simultaneously stained with PE-conjugated PK136 (anti-mouse NK1.1, Cat. No. 557391/553165, both panels) and biotinylated 2B4 (right panel) monoclonal antibodies, followed by Avidin-FITC (Cat. No. 554057, both panels). Flow cytometry was performed on a BD FACScan™ System (BD Biosciences, San Jose, CA).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes**Application**

Flow cytometry

Routinely Tested

BD Biosciences

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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
559531	Biotin Mouse IgG2b, κ Isotype Control	0.25 mg	MPC-11
554060	FITC Streptavidin	0.5 mg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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