Datasheet for ABIN2689114

anti-2B4 antibody (Biotin)

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Overview

Quantity:	0.1 mg
Target:	2B4 (CD244)
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This 2B4 antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	rIL-2-propagated NK1.1+ cells from C57BL/6 mice
Clone:	2B4
Isotype:	IgG2b kappa
Characteristics:	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 cytoxicity, 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

Product Details

	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 Pharmingen™ Biotin Mouse Anti-Mouse CD244.2 - Biotin - Clone 2B4 - Isotype Mouse IgG2b, κ - Reactivity Ms - 0.1 mg
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	2B4 (CD244)
Alternative Name:	CD244.2 (CD244 Products)
Background:	Synonyms: 2B4 B6 Alloantigen

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.
Storage:	4 °C

Handling

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

Publications

Product cited in:

Rosmaraki, Douagi, Roth, Colucci, Cumano, Di Santo: "Identification of committed NK cell progenitors in adult murine bone marrow." in: **European journal of immunology**, Vol. 31, Issue 6 , pp. 1900-9, (2001) (PubMed).

Kumaresan, Stepp, Bennett, Kumar, Mathew: "Molecular cloning of transmembrane and soluble forms of a novel rat natural killer cell receptor related to 2B4." in: **Immunogenetics**, Vol. 51, Issue 4-5, pp. 306-13, (2000) (PubMed).

Brown, Boles, van der Merwe, Kumar, Mathew, Barclay: "2B4, the natural killer and T cell immunoglobulin superfamily surface protein, is a ligand for CD48." in: **The Journal of experimental medicine**, Vol. 188, Issue 11, pp. 2083-90, (1999) (PubMed).

Kubota, Katoh, Muguruma, Koyama: "Characterization of a surface membrane molecule expressed by natural killer cells in most inbred mouse strains: monoclonal antibody C9.1 identifies an allelic form of the 2B4 antigen." in: **Immunology**, Vol. 96, Issue 3, pp. 491-7, (1999) (PubMed).

Schatzle, Sheu, Stepp, Mathew, Bennett, Kumar: "Characterization of inhibitory and stimulatory forms of the murine natural killer cell receptor 2B4." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 96, Issue 7, pp. 3870-5, (1999) (PubMed).

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