

## Technical Data Sheet

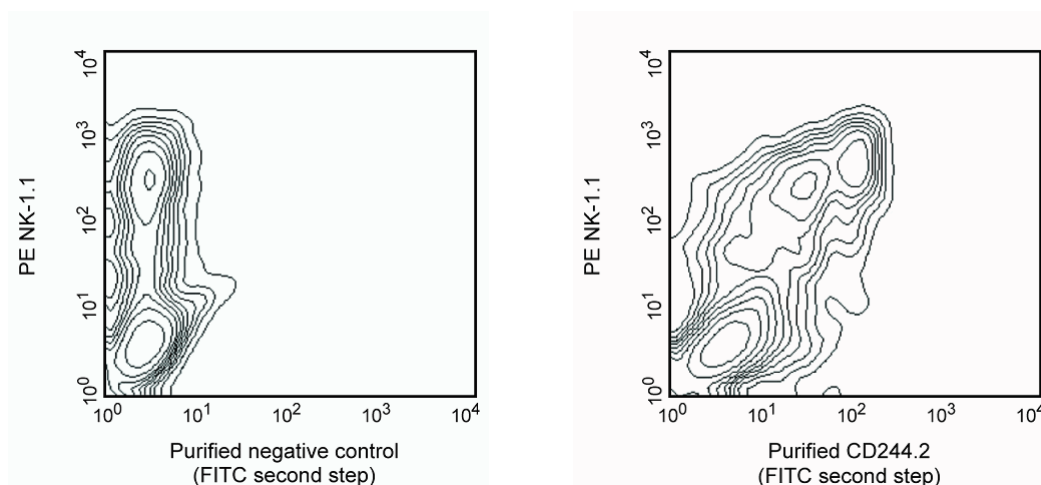
## Purified Mouse Anti-Mouse CD244.2

## Product Information

<b>Material Number:</b>	<b>557451</b>
<b>Alternate Name:</b>	2B4 B6 Alloantigen
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	2B4
<b>Immunogen:</b>	rIL-2-propagated NK1.1+ cells from C57BL/6 mice
<b>Isotype:</b>	Mouse (129) IgG2b, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	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 NK-1.1, Cat. No. 557391/553165, both panels) and purified 2B4 (right panel) monoclonal antibodies, followed by FITC-conjugated anti-mouse IgG2b mAb R12-3 (Cat. No. 553395, 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. Store undiluted at 4° C.

## BD Biosciences

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## Application Notes

### Application

Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Induction	Reported
Augmentation	Reported
Immunohistochemistry-frozen	Not Recommended
Immunohistochemistry-paraffin	Not Recommended

## Suggested Companion Products

Catalog Number	Name	Size	Clone
557391	PE Mouse Anti-Mouse NK-1.1	0.1 mg	PK136
553395	FITC Rat Anti-Mouse IgG2b	0.5 mg	R12-3
557351	Purified Mouse IgG2b, $\kappa$ Isotype Control	0.5 mg	MPC-11

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

## References

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