Technical Data Sheet

PE Mouse Anti-Human CD244

Product Information

Material Number: 550816

Alternate Name: 2B4; SLAMF4; NAIL; NK cell activation inducing ligand; NKR2B4; Nmrk

 Size:
 100 tes

 Vol. per Test:
 20 μl

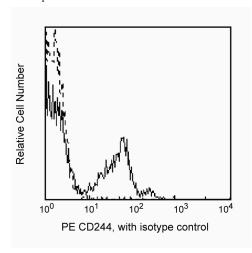
 Clone:
 2-69

 $\begin{tabular}{lll} \textbf{Isotype:} & Mouse IgG2a, κ \\ \textbf{Reactivity:} & QC Testing: Human \\ \end{tabular}$

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 2-69 monoclonal antibody specifically binds to 2B4 which is also known as CD244. CD244 is an approximately 63-70 kDa type I transmembrane glycoprotein. It is a SLAM submember (SLAMF4) and CD2 family member of the immunoglobulin superfamily. CD244 was originally identified in the mouse as a non-MHC-restricted cytotoxicity mediator present on NK cells and CD8+ T cells. In humans, CD244 is expressed on NK cells, $\gamma\delta$ T cells, subsets of effector and memory CD8+ T cells, monocytes, eosinophils and basophils. This expression pattern suggests a broad role for CD244 in the regulation of leukocyte activation. CD244 binds CD48 with high affinity. CD244 may serve both stimulatory and inhibitory functions depending on a number of factors. These include the intensity and duration of CD244 interactions with its ligands as well as the presence of other signals generated through different receptor-ligand interactions. 2B4 was clustered as CD244 in the VIIth HLDA workshop.



Profile of CD244 (2-69) reactivity on peripheral blood lymphocytes analyzed by flow cytometry

Preparation and Storage

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

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555574	PE Mouse IgG2a, κ Isotype Control	100 tests	G155-178
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-µl experimental sample (a test).

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- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 5. An isotype control should be used at the same concentration as the antibody of interest.
- 6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Barclay NA, Brown MH, Birkeland ML, et al, ed. The Leukocyte Antigen FactsBook. San Diego, CA: Academic Press; 1997. (Biology)

Mason D, Andre P, Bensussan A, ed. Leukocyte Typing VII. New York: Oxford University Press; 2002. (Biology)

Mathew PA, Garni-Wagner BA, Land K, et al. Cloning and characterization of the 2B4 gene encoding a molecule associated with non-MHC-restricted killing mediated by activated natural killer cells and T cells. *J Immunol*. 1993; 151(10):5328-5337. (Biology)

Nakajima H, Cella M, Langen H, Friedlein A, Colonna M. Activating interactions in human NK cell recognition: the role of 2B4-CD48. *Eur J Immunol.* 1999; 29(5):1676-1683. (Biology)

Sivori S, Parolini S, Falco M, et al. 2B4 functions as a co-receptor in human NK cell activation. Eur J Immunol. 2000; 30(3):787-793. (Biology)

Tangye SG, Lazetic S, Woollatt E, Sutherland GR, Lanier LL, Phillips JH. Cutting edge: human 2B4, an activating NK cell receptor, recruits the protein tyrosine phosphatase SHP-2 and the adaptor signaling protein SAP. *J Immunol.* 1999; 162(12):6981-6985. (Biology)

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