

Technical Data Sheet

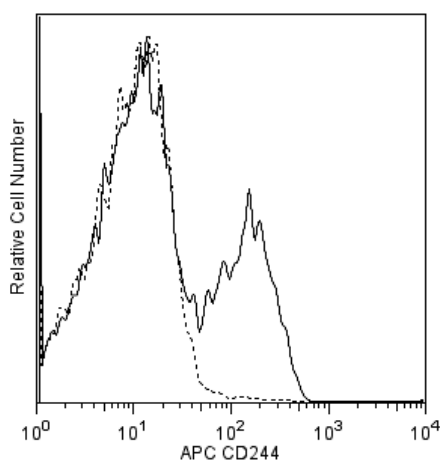
APC Mouse Anti-Human CD244

Product Information

Material Number:	562350
Alternate Name:	2B4; SLAMF4; NAIL; NK cell activation inducing ligand ; NKR2B4; Nmrk
Size:	50 tests
Vol. per Test:	5 µl
Clone:	2-69
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing Human
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, γδ 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.



Flow cytometric analysis of CD244 expression on human peripheral blood lymphocytes. Human whole blood was stained with either APC Mouse Anti-Human CD244 antibody (Cat. No. 562350; solid line histogram) or with an APC Mouse IgG2a, κ Isotype Control (Cat. No. 550882/555576; dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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 to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)
550882	APC Mouse IgG2a κ Isotype Control	0.1 mg	G155-178
555576	APC Mouse IgG2a, κ Isotype Control	100 tests	G155-178

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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Colonna M, Nakajima H, Cella M. Inhibitory and activating receptors involved in immune surveillance by human NK and myeloid cells. *J Leukoc Biol*. 1999; 66(5):718-722. (Biology)

Latchman Y, McKay PF, Reiser H. Identification of the 2B4 molecule as a counter-receptor for CD48. *J Immunol*. 1998; 161(11):5809-5812. (Biology)

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