

Technical Data Sheet

PE Mouse Anti-Human CD172b

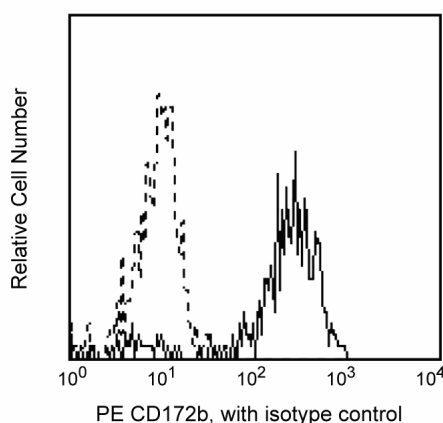
Product Information

Material Number:	552602
Alternate Name:	SIRPβ
Size:	100 tests
Vol. per Test:	20 µl
Clone:	B4B6
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with a 50 kDa, type I transmembrane glycoprotein known as signal regulatory protein β (SIRPβ). The SIRPs are members of the immunoglobulin superfamily. SIRPβ does not possess a cytoplasmic domain but instead the transmembrane domain contains a positively-charged residue that interacts with one other transmembrane protein (DAP-12 or KARAP). DAP-12 has two immunoreceptor tyrosine-based activation motifs (ITAM) within its cytoplasmic domain that are thought to link SIRPβ to activating machinery. SIRPβ is expressed on peripheral blood monocytes and granulocytes, but is not expressed on CD34+ cells. SIRPα and SIRPβ have complementary roles in signal regulation and may work together in tuning the response to a stimulus.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of CD172b expression, SIRP β1 (B4B6) on peripheral blood monocytes analyzed by flow cytometry

Preparation and Storage

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 by gel filtration chromatography.

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

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
5. 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.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Dietrich J, Cella M, Seiffert M, Bühring HJ, Colonna M. Cutting edge: signal-regulatory protein beta 1 is a DAP12-associated activating receptor expressed in myeloid cells. *J Immunol.* 2000; 164(1):9-12.(Biology)

Seiffert M, Brossart P, Cant C, et al. Signal-regulatory protein alpha (SIRPalpha) but not SIRPbeta is involved in T-cell activation, binds to CD47 with high affinity, and is expressed on immature CD34(+)CD38(-) hematopoietic cells. *Blood.* 2001; 97(9):2741-2749.(Biology)

Seiffert M, Cant C, Chen Z, et al. Human signal-regulatory protein is expressed on normal, but not on subsets of leukemic myeloid cells and mediates cellular adhesion involving its counterreceptor CD47. *Blood.* 1999; 94(11):3633-3643.(Biology)