

Technical Data Sheet

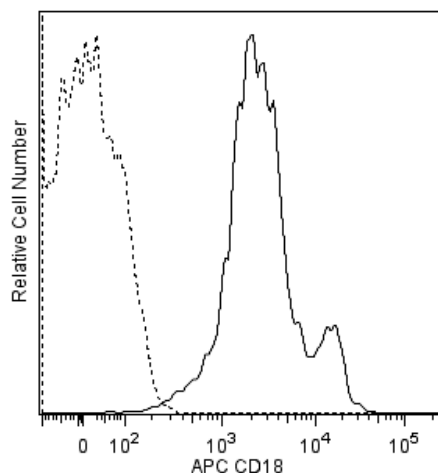
APC Rat Anti-Mouse CD18

Product Information

Material Number:	562828
Alternate Name:	Integrin $\beta 2$ chain; Itgb2; Integrin beta 2; LFA-1/CR3/p150,95 subunit beta
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	C71/16
Immunogen:	Cell membrane glycoproteins from mouse T-cell lymphoma BW5147
Isotype:	Rat (LEW) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The C71/16 monoclonal antibody specifically binds to mouse CD18 which is also known as the common $\beta 2$ chain of LFA-1 (CD11a/CD18, $\alpha L\beta 2$ integrin), Mac-1 (CD11b/CD18, $\alpha M\beta 2$ integrin), and gp150, 95 (CD11c/CD18, $\alpha X\beta 2$ integrin). CD18 is a type I transmembrane glycoprotein. Expression of CD18 is limited to leukocytes, where it is widely distributed in consort with the three integrin α chains (CD11a, CD11b, and CD11c). Among splenocytes, NK cells have the highest density of CD18, and T lymphocytes express a higher density than the remaining cells. The $\beta 2$ integrins are important mediators of leukocyte-endothelium interactions.



Flow cytometric analysis of CD18 expression on mouse splenocytes. Splenic leukocytes from C57BL/6 mice were stained with either APC Rat anti-Mouse CD18 antibody (Cat. No. 562828, solid line histogram) or APC Rat IgG2a, κ Isotype Control (Cat. No. 553932, dashed line histogram). Flow cytometric histograms were derived from gated events with the forward and side light-scattering characteristics of viable leukocytes. Flow cytometry was performed on a BD™ LSR II Flow Cytometry 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
554656	Stain Buffer (FBS)	500 ml	(none)
553932	APC Rat IgG2a κ Isotype Control	0.1 mg	R35-95
555899	Lysing Buffer	100 ml	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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.

References

Springer TA. Traffic signals for lymphocyte recirculation and leukocyte emigration: the multistep paradigm. *Cell*. 1994; 76(2):301-314. (Biology)
Springer TA. Adhesion receptors of the immune system. *Nature*. 1990; 346(6283):425-434. (Biology)
Trowbridge IS, Omary MB. Molecular complexity of leukocyte surface glycoproteins related to the macrophage differentiation antigen Mac-1. *J Exp Med*. 1981; 154(5):1517-1524. (Immunogen: Flow cytometry, Immunoprecipitation)

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