

Technical Data Sheet

Purified Mouse Anti-Rat CD18

Product Information

Material Number:	554977
Alternate Name:	Integrin $\beta 2$ chain
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	WT.3
Immunogen:	PHA-stimulated rat splenocytes and rat thymic lymphoma FTL-43
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The WT.3 antibody reacts with the 95-100 kDa $\beta 2$ subunit (CD18), which is found on the majority of leukocytes as a heterodimer with any of the three distinct CD11 α integrin subunits (CD11a or αL , CD11b or αM , CD11c or αX) to form, respectively, LFA-1, Mac-1, and gp150, 95. The function-blocking activity of WT.3 antibody has been determined in several in vitro assays measuring the binding of LFA-1 ($\alpha L\beta 2$ integrin) to ICAM-1 (CD54). It has also been reported that WT.3 mAb inhibits leukocyte infiltration in an in vivo system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-zinc-fixed	Tested During Development
Immunoprecipitation	Reported
Blocking	Reported

Recommended Assay Procedure:

Caution: 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 for in vitro and in vivo use.

Suggested Companion Products

Catalog Number	Name	Size	Clone
557273	Purified Mouse IgG1, κ Isotype Control	0.5 mg	MOPC-31C
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/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.

References

Tamatani T, Kotani M, Miyasaka M. Characterization of the rat leukocyte integrin, CD11/CD18, by the use of LFA-1 subunit-specific monoclonal antibodies. *Eur J Immunol.* 1991; 21(3):627-633. (Immunogen: Blocking, Immunoprecipitation)
 Yamazaki T, Seko Y, Tamatani T, et al. Expression of intercellular adhesion molecule-1 in rat heart with ischemia/reperfusion and limitation of infarct size by treatment with antibodies against cell adhesion molecules. *Am J Pathol.* 1993; 143(2):410-418. (Clone-specific: Blocking)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD

