Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD51

Product Information

Material Number:	552299
Alternate Name:	Integrin αV chain
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	RMV-7
Immunogen:	Mouse (BALB/c) IL-2-activated killer (LAK) Cells
Isotype:	Rat (SD) IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative,
0	0.2µm sterile filtered. Endotoxin level is \leq 0.01 EU/µg (\leq 0.001 ng/µg) of
	protein as determined by the LAL assay.

Description

The rat anti-mouse CD51 (clone RMV-7) antibody reacts with the 140 kDa integrin α V chain. Heterodimers of CD51 with several integrin β chains function as receptors for extracellular matrix proteins. CD51/CD61 (α V β 3 integrin, vitronectin receptor) mediates adhesion to fibronectin, fibrinogen, vitronectin, thrombospondin, von Willebrand factor, and CD31 (PECAM-1). It has been reported to be expressed on activated T lymphocytes, polymorphonuclear granulocytes, blastocysts, and osteoclasts. CD51 has reportedly been found to be undetectable on mouse platelets using either antibody clones H9.2B8 or RMV-7. CD51 also forms heterodimers with CD29 (integrin β 1), integrins β 5, β 6, and β 8 chains. α V integrins have diverse functions in development and homeostasis. The rat anti-mouse (clone RMV-7) mAb has been reported to block LAK-cell binding to vitronectin, fibrinogen, and CD31. Furthermore, the RMV-7 clone reportedly inhibits LAK-cell cytoxicity against certain target cells by interfering with the binding of LAK cells to their target cells.

Preparation and Storage

Store undiluted at 4°C.

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

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
Blocking	Reported
Immunoprecipitation	Reported

Recommended Assay Procedure:

Flow cytometry: Investigators may wish to consider using a second-step reagent conjugated to a "bright" fluorochrome, such as PE Goat Anti-Rat Ig (Cat. No. 550767), as CD51 may be expressed at low density on the cell surface.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553921	Purified NA/LE Rat IgG1, ĸ Isotype Control	0.5 mg	R3-34
550767	PE Goat Anti-Rat Ig	0.2 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.

References

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function-associated antigen-1-independent killer-target cell interaction. J Immunol. 1990; 145(12):4371-4379. (Immunogen: Blocking, Immunoprecipitation)