

## Technical Data Sheet

## FITC Mouse Anti-Rat CD42d

## Product Information

|                         |  |
|-------------------------|--|
| <b>Material Number:</b> | 551805   |
| <b>Alternate Name:</b>  | Platelet Glycoprotein V  |
| <b>Size:</b>            | 0.1 mg   |
| <b>Concentration:</b>   | 0.5 mg/ml  |
| <b>Clone:</b>           | RPM.4  |
| <b>Immunogen:</b>       | Wistar rat platelets   |
| <b>Isotype:</b>         | Mouse (BALB/c) IgG2a, $\kappa$                                   |
| <b>Reactivity:</b>      | QC Testing: Rat  |
| <b>Storage Buffer:</b>  | Aqueous buffered solution containing $\leq 0.09\%$ sodium azide. |

## Description

The RPM.4 antibody reacts with CD42d (Platelet glycoprotein V, GPV), an 88-kDa glycoprotein which noncovalently associates with GPIb and GPIX to form a receptor for von Willebrand factor on megakaryocytes and resting platelets. The binding sites for von Willebrand factor and thrombin have been localized to the GPIIb $\alpha$  chain of the GPIIb-V-IX complex. GPV is cleaved by thrombin to release a 70 kDa soluble fragment, which contains the epitope recognized by mAb RPM.4. Although the rat CD42d protein's structure is similar to that of human CD42d, the RPM.4 antibody does not cross-react with human platelets.

## Preparation and Storage

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

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

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

## Application Notes

## Application

|                |                  |
|----------------|------------------|
| Flow cytometry | Routinely Tested |
|----------------|------------------|

## Suggested Companion Products

| Catalog Number | Name                                       | Size    | Clone    |
|----------------|--|---------|----------|
| 553456         | FITC Mouse IgG2a, $\kappa$ Isotype Control | 0.25 mg | G155-178 |

## 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](http://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

Ravanat C, Morales M, Azorsa DO, et al. Gene cloning of rat and mouse platelet glycoprotein V: identification of megakaryocyte-specific promoters and demonstration of functional thrombin cleavage. *Blood*. 1997; 89(9):3253-3262.(Immunogen)

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