

## Technical Data Sheet

## Biotin Rat Anti-Mouse CD106

## Product Information

|                  |  |
|------------------|--|
| Material Number: | 553331   |
| Alternate Name:  | VCAM-1   |
| Size:            | 0.5 mg   |
| Concentration:   | 0.5 mg/ml  |
| Clone:           | 429 (MVCAM.A)  |
| Immunogen:       | Mouse preadipose cell line PA6                                   |
| Isotype:         | Rat (LEW) IgG2a, $\kappa$  |
| Reactivity:      | QC Testing: Mouse  |
| Storage Buffer:  | Aqueous buffered solution containing $\leq 0.09\%$ sodium azide. |

## Description

The 429 antibody reacts with both the long (~110 kDa) transmembrane-spanning form and the truncated (~47 kDa) GPI-linked form of vascular cell adhesion molecule-1 (VCAM-1, CD106). CD106 is constitutively expressed on bone marrow stromal cells, myeloid cells, and splenic dendritic cells. Its expression on endothelial cells is upregulated by inflammatory cytokines and in certain pathologic conditions. CD106 expression has also been detected on apoptotic thymocytes, splenocytes, and lymphoid cell lines. VCAM-1 is a counter-receptor for VLA-4 ( $\alpha 4\beta 1$  integrin) and LPAM-1 ( $\alpha 4\beta 7$  integrin), and the 429 antibody partially blocks VCAM-1-mediated binding functions. Source of the immunogen was mouse preadipose cell line PA6.

## Preparation and Storage

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

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin 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  |
|----------------|---|---------|--------|
| 553928         | Biotin Rat IgG2a $\kappa$ Isotype Control | 0.25 mg | R35-95 |
| 554060         | FITC Streptavidin                         | 0.5 mg  | (none) |

## 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

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- Ishiyama N, Kitagawa M, Takahashi H, Kina T, Hirokawa K. Expression of VCAM-1 in lymphocytes during the process of apoptosis. *Pathobiology.* 1998; 66(6):274-283.(Biology)
- Kinashi T, Springer TA. Adhesion molecules in hematopoietic cells. *Blood Cells.* 1994; 20(1):25-44.(Biology)
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