# Data Sheet (Cat.No.TMAY-03150)

## Anti-VCAM-1 Antibody (5T238)

### Product Details

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| Ig Type: | Rabbit IgG |
| Reactivity: | Mouse |
| Conjugation: | Unconjugated |
| Clone: | 5T238 |
| Purification: | Protein A |

### Applications

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| Verified Activity: | 1. Anti-VCAM1 rabbit monoclonal antibody at 1:500 dilution.<br>-Lane A: NIH 3T3 Whole Cell Lysate.<br>-Lane B: Mouse brain tissue Lysate.<br>-Lane C: Mouse kidney tissue lysate.<br>-Lysates/proteins at 30 µg per lane.<br>-Secondary<br>-Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution.<br>-Developed using the ECL technique.<br>-Performed under reducing conditions.<br>-Predicted band size:81 kDa.<br>-Observed band size:100 kDa.<br>2. Flow cytometric analysis of Mouse VCAM1(CD106) expression on BABL/c bone marrow cells. Cells were stained with purified anti-Mouse VCAM1(CD106), then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells. |
| Application: | FCM,WB |
| Recommended | WB: 1:500-1:2000; FCM: 1:25-1:100 |

### Properties

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| Stability & Storage: | Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free. |
| Shipping: | Shipping with blue ice. |

### Antigen Details

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| Immunogen: | Recombinant Protein: Mouse VCAM1/VCAM-1/CD106 Protein (TMPY-01830) |
| Antigen Species: | Mouse |
| Synonyms: | vascular cell adhesion molecule 1;INCAM-100;VCAM-1;CD106 |

### Research Background

Vascular cell adhesion molecule 1 (VCAM-1), also known as CD106, is a cell surface sialoglycoprotein belonging to the immunoglobulin superfamily. Two forms of VCAM-1 with either six or seven extracellular Ig-like domains are generated by alternative splicing, with the longer form predominant. VCAM-1 is an endothelial ligand for very late antigen-4 (VLA-4) and α4ß7 integrin expressed on leukocytes, and thus mediates leukocyte-endothelial cell

adhesion and signal transduction. VCAM-1 expression is induced on endothelial cells during inflammatory bowel disease, atherosclerosis, allograft rejection, infection, and asthmatic responses. During these responses, VCAM-1 forms a scaffold for leukocyte migration. VCAM-1 also activates signals within endothelial cells resulting in the opening of an "endothelial cell gate" through which leukocytes migrate. VCAM-1 has been identified as a potential anti-inflammatory therapeutic target, the hypothesis being that reduced expression of VCAM-1 will slow the development of atherosclerosis. In addition, VCAM-1-activated signals in endothelial cells are regulated by cytokines indicating that it is important to consider both endothelial cell adhesion molecule expression and function during inflammatory processes.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy