abcam

**ab24853**

# FITC Anti-VCAM1 antibody [M/K-2]

Anti-VCAM1 antibody [M/K-2] conjugated to FITC - suitable for flow cytometry, and reacts with mouse samples. Clone [M/K-2] is a rat monoclonal antibody cited in 10 publications.

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## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Rat |
| **Conjugation** | FITC |
| **Excitation/Emission** | Ex: 495nm, Em: 519nm |
| **Storage buffer** | pH: 7.4 |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Clone number** | M/K-2 |
| **Purification technique** | Affinity purification |
| **Light chain type** | kappa |
| **Concentration** | 0.5 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Mouse |

| | |
|---|---|
| **Dilution info** | 1 µg for $10^6$ Cells |
| **Notes** | ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## Target data

See full target information Vcam1

| | |
|---|---|
| **Function** | Cell adhesion glycoprotein predominantly expressed on the surface of endothelial cells that plays an important role in immune surveillance and inflammation. Acts as a major regulator of leukocyte adhesion to the endothelium through interaction with different types of integrins. During inflammatory responses, binds ligands on the surface of activated endothelial cells to initiate the activation of calcium channels and the plasma membrane-associated small GTPase RAC1 leading to leukocyte transendothelial migration. Also serves as a quality-control checkpoint for entry into bone marrow by providing a 'don't-eat-me' stamping in the context of major histocompatibility complex (MHC) class-I presentation. |

## Storage

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|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Store in the dark |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

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|---|---|
| **Activity summary** | VCAM1 also known as vascular cell adhesion molecule 1 plays an important role in mediating adhesion and signal transduction. VCAM1 has an approximate molecular mass of 110 kDa. It is expressed on the surface of endothelial cells and can be upregulated by cytokines released during inflammation. The protein serves as a ligand for the integrin VLA-4 also known as α4β1 and contributes to the adhesion of leukocytes to endothelial cells. |
| **Biological function summary** | Adhesion molecules like VCAM1 participate in immune response by recruiting leukocytes to sites of inflammation. VCAM1 helps guide immune cells to directed locations where they perform defense activities. Although VCAM1 is not part of any known large protein complex its interaction with integrins facilitates the migration of immune cells across the endothelium and into tissue. |

| | |
|---|---|
| **Pathways** | VCAM1 contributes significantly to the leukocyte extravasation process in inflammatory pathways. It plays a role in both the cytokine-cytokine receptor interaction pathway and the NF-kB signaling pathway which are essential for immune response and cell signaling. Through these pathways it interacts with proteins like ICAM1 and various chemokines helping to coordinate the immune cell movement through vascular tissue barriers. |
| **Associated diseases and disorders** | Abnormal regulation of VCAM1 links to various cardiovascular diseases such as atherosclerosis and inflammatory diseases like rheumatoid arthritis. The protein levels may increase in these conditions promoting excessive immune cell recruitment and tissue damage. VCAM1 also interfaces with other proteins like ICAM1 in these pathological states which together contribute to the progression and severity of these diseases. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

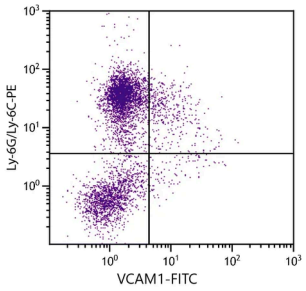
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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## 1 product image




# Flow Cytometry - FITC Anti-VCAM1 antibody [M/K-2] (ab24853)

VCAM1 Flow Cytometry staining using rat Anti-VCAM1 antibody

Flow Cytometry analysis of C57BL/6 mouse bone marrow cells stained with anti VCAM1 antibody [M/K-2] (FITC) (ab24853) and Rat Anti-Mouse Ly-6G/Ly-6C-PE. 1 µg of antibody was used for $10^6$ cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.